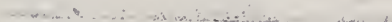






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Alimony
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COVER

The Less Than Equal Medical Treatment women receive has been called the Yentl syndrome. Not only do their health problems receive less research attention than men's, but women also receive inequitable care, even when their complaints are similar to men's, says this month's feature story (page 16). That story and our interview with Doris Brooker, M.D., an ob/gyn pathologist specializing in women's health (page 9), describe how women in Minnesota and elsewhere are confronting this bias.

Illustration by Linda Frichtel.

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CONTACT LASER LAPAROSCOPY CHOLECYSTECTOMY COURSE
Chairman: Richard Zera, MD

2 February 14, 1992
MINNESOTA DERMATOLOGICAL SOCIETY WINTER CONFERENCE
Chairman: Bruce Bart, MD

3 April 14, 1992
**MINNESOTA REGIONAL SLEEP DISORDERS CENTER (MRSDC)
ANNUAL DINNER LECTURE-DAVID DINGES, PHD**
Sleep research related topic
Chairman: Mark Mahowald, MD,
Minneapolis Athletic Club, Minneapolis

4 April 10, 1992
**ANNUAL JOHN I. COE CONFERENCE
"CURRENT CONCEPTS IN DERMATOPATHOLOGY"**
Held in conjunction with MSCP April 11, 1991 annual meeting
Chairman: Robert L. Strom, MD

5 April 24, 1992
ANNUAL PRACTICAL GI CONFERENCE FOR PRIMARY CARE
Co-sponsored with St. Paul Ramsey Medical Center
Co-Chairmen: Martin Freeman, MD/Robert Olson, MD

6 May 14-16, 1992
ACUPUNCTURE FOR PAIN CONTROL
Chairman: Miles Belgrade, MD

7 May 21-22, 1992
PRIMARY CARE TREATMENT FOR PRESSURE SORES
Special afternoon tracks for physicians and nurses
Chairman: George Peltier, MD

8 June 13, 1992
HCMC INTERN CLASS OF '61 MEDICAL REVIEW
Chairman: John Crosson, MD

9 June, 1992
CRISIS INTERVENTION PROGRAM
Chairman: Zigfrids Stelmachers, PhD

10 July 16-19, 1992
ADVANCES IN CLINICAL MANAGEMENT OF INFECTIOUS DISEASES
Co-Chairmen: Phillip Peterson, MD, HCMC/Dale Gerding, MD, VAMC
Brainerd, Minnesota

11 Fall, 1992
NEUROLOGY CME AND ANNUAL A. B. BAKER DINNER LECTURE
Chairman: Milton Ettinger, MD; Location/Topics to be announced

12 Fall, 1992
PEDIATRIC HEAD INJURIES CONFERENCE
Co-Chairmen: David Fisher, MD/Thomas Rolewicz, MD

13 September, October, November, 1992
HEALTH CARE OBJECTIVES FOR THE YEAR 2000
A three part lecture series
Co-Chairmen: Charles Oberg, MD/Pam Thul-Immler, RN

14 September 10-11, 1992
APPLIED CLINICAL RESEARCH METHODS
Co-Chairmen: Nicole Lurie, MD/Alfred Pheley, PhD

15 September 18, 1992
PAIN MANAGEMENT FOR THE PRIMARY CARE PHYSICIAN
Chairman: Miles Belgrade, MD

16 September 18-20, 1992
ANNUAL AMBULANCE MEDICAL DIRECTOR RETREAT
Chairman: David Larson, MD; Brainerd, Minnesota

17 September 24-26, 1992
4TH INTERNATIONAL VAGINAL SURGERY PROGRAM
Chairman: Stephen Cruikshank, MD; Ritz Carlson, St. Louis, MO

18 September 24-25, 1992
TRAUMA AND CRITICAL CARE CONFERENCE
Co-Chairmen: Brian Mahoney, MD/Arthur Ney, MD

19 October 1992
TEACHING THE MEDICAL INTERVIEW
Chairman: Gregory Silvis, MD

20 October 8-9, 1992
ANNUAL FORENSIC SCIENCE SEMINAR
Chairman: Garry Peterson, MD

21 October 9, 1992
ANNUAL CONTEMPORARY ISSUES IN DIALYSIS THERAPY
Chairman: Robert Berkseth, MD; Sheraton Midway Hotel, St. Paul

22 October 16, 1992
ANNUAL ADVANCES IN GERIATRIC CARE
Chairman: Patrick Irvine, MD

23 October 22-24, 1992
27TH ANNUAL ORTHOPAEDIC AND TRAUMA SEMINAR
Chairman: Ramon Gustilo, MD

24 November 5-6, 1992
MEDICAL INTENSIVE CARE CONFERENCE
Chairman: James Leatherman, MD

25 November 13-14, 1992
**HUNTINGTON'S DISEASE:
PRACTICAL APPROACHES TO PATIENT AND FAMILY CARE**
Chairman: Martha Nance, MD; Minneapolis Athletic Club

26 November 20-21, 1992
PRIMARY CARE UPDATE/SPORTS MEDICINE
Chairman: Patricia Cole, MD

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Confronting Bias in Health Care

Edmund C. Burke, M.D.

Undeniably, women have received inequitable medical care as compared with men. They have received inferior diagnoses and treatments, in large part, because research on women's health has been inadequate. The U.S. Public Health Service's Task Force on Women's Health Issues reported in 1985 that a lack of research limits the understanding of women's health needs. Similar conclusions have been appearing with increasing frequency in leading medical journals and the general media.

Still, in talking with some of my colleagues, I discovered that they are surprised by this bias. I believe their surprise may prove a point—that we have historically assumed what is good for men is good for women. As a result, research on men is often mistakenly applied to women.

Researchers are reluctant to perform studies on women of childbearing age for fear that the treatment or procedure might adversely affect reproductive capabilities—or damage the fetus if the patient becomes pregnant. Women have also been excluded from research because of their hormonal cycles, which can affect therapeutic interventions. However, it is precisely because of these unpredictable hormonal effects that women should be included in research.

Although biological factors account for some differences in the provision of care for men and women, studies indicate that nonbiological factors may also affect clinical decision making. In the July 25 *New England Journal of Medicine*, two articles document evidence of sex bias in the management of coronary heart disease. In one study, women were half as likely as men to undergo cardiac catheterization. Is this bias due to stereotypes of men's greater



"We have historically assumed what is good for men is good for women."

societal value, as the AMA's Council on Ethical and Judicial Affairs speculates in the July 24 *Journal of the American Medical Association*?

Whatever the factors, this health care gender gap is cause for concern. After studying the issue, the AMA council recommended that physicians examine their practices and attitudes for biases that might affect medical care; that research on women's health be pursued; and that we work to increase the number of women physicians in leadership roles, which would help to enhance the awareness of socio-cultural factors that lead to gender disparities.

In this month's Face to Face interview (page 9), Doris Brooker, M.D., chair of the MMA's Committee on Women Physicians, shares her belief that organized medicine provides a voice for women's health issues. In fact, as our feature story (page 16) discusses, within medicine and without, women are becoming more politically active in efforts to ensure that their demand for equal medical treatment is heard.

Bernadine Healy, M.D., director of the National Institutes of Health, is another who believes it is time for a general awakening to the fact that women have unique medical problems. In an editorial in the July 25 *New England Journal*, she states that women have greater morbidity than men and are affected by more chronic debilitating illness. Although women live longer, their quality of life may be burdened by breast cancer, lung and colon cancer, heart disease, stroke, osteoporosis, depression, and general frailty. She notes that the NIH has mounted a multi-disciplinary, multi-institute intervention study, called the Women's Health Initiative, to address the major causes of death, disability, and frailty among middle-aged and older women. More than 140,000 women will participate in the \$500 million study.

On a smaller scale, Minnesota has created a new task force to advise the commissioner of health on women's health issues. Dr. Brooker, who was instrumental in establishing the task force, describes its objectives more fully in her interview.

Individually, we can all work to improve health in our communities. Internists I recently spoke with stressed the need for health care responsibility. We should be very concerned, for example, that in spite of campaigns to eliminate smoking, a high percentage of young women still smoke, and we must strive to educate young people about the too-often deadly consequences down the road.

We must continually counsel against risk-taking activities. Drug and alcohol abuse, sexually transmitted diseases, and unwanted pregnancy demand our utmost effort in teaching healthier lifestyles. **MM**

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Carcinogenesis, Mutagenesis, Impairment of Fertility—A 2-year oral carcinogenicity study in rats with doses as high as 500 mg/kg/day (about 80 times the recommended daily therapeutic dose) showed no evidence of a carcinogenic effect. There was a dose-related increase in the density of enterochromaffin-like (ECL) cells in the gastric oxyntic mucosa. In a 2-year study in mice, there was no evidence of a carcinogenic effect in male mice, although hyperplastic nodules of the liver were increased in the high-dose males as compared with placebo. Female mice given the high dose of Axid (2,000 mg/kg/day, about 330 times the human dose) showed marginally statistically significant increases in hepatic carcinoma and hepatic nodular hyperplasia with no numerical increase seen in any of the other dose groups. The rate of hepatic carcinoma in the high-dose animals was within the historical control limits seen for the strain of mice used. The female mice were given a dose larger than the maximum tolerated dose, as indicated by excessive (30%) weight decrement as compared with concurrent controls and evidence of mild liver injury (transaminase elevations). The occurrence of a marginal finding at high dose only in animals given an excessive and somewhat hepatotoxic dose, with no evidence of a carcinogenic effect in rats, male mice, and female mice (given up to 360 mg/kg/day, about 60 times the human dose), and a negative mutagenicity battery are not considered evidence of a carcinogenic potential for Axid.

Axid was not mutagenic in a battery of tests performed to evaluate its potential genetic toxicity, including bacterial mutation tests, unscheduled DNA synthesis, sister chromatid exchange, mouse lymphoma assay, chromosome aberration tests, and a micronucleus test.

In a 2-generation, perinatal and postnatal fertility study in rats, doses of nizatidine up to 650 mg/kg/day produced no adverse effects on the reproductive performance of parental animals or their progeny.

Pregnancy—Teratogenic Effects—Pregnancy Category C—Oral reproduction studies in rats at doses up to 300 times the human dose and in Dutch Belted rabbits at doses up to 55 times the human dose revealed no evidence of impaired fertility or teratogenic effect, but, at a dose equivalent to 300 times the human dose, treated rabbits had abortions, decreased number of live fetuses, and depressed fetal weights. On intravenous administration to pregnant New Zealand White rabbits, nizatidine at 20 mg/kg produced cardiac enlargement, coarctation of the aortic arch, and cutaneous edema in 1 fetus, and at 50 mg/kg, it produced ventricular anomaly, distended abdomen, spina bifida, hydrocephaly, and enlarged heart in 1 fetus. There are, however, no adequate and well-controlled studies in pregnant women. It is also not known whether nizatidine can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Nizatidine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers—Studies in lactating women have shown that 0.1% of an oral dose is secreted in human milk in proportion to plasma concentrations. Because of growth depression in pups reared by treated lactating rats, a decision should be made whether to discontinue nursing or the drug, taking into account the importance of the drug to the mother.

Pediatric Use—Safety and effectiveness in children have not been established.

Use in Elderly Patients—Healing rates in elderly patients were similar to those in younger age groups as were the rates of adverse events and laboratory test abnormalities. Age alone may not be an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function.

Adverse Reactions: Worldwide, controlled clinical trials included over 6,000 patients given nizatidine in studies of varying durations. Placebo-controlled trials in the United States and Canada included over 2,600 patients given nizatidine and over 1,700 given placebo. Among the adverse events in these placebo-controlled trials, only anemia (0.2% vs 0%) and urticaria (0.5% vs 0.1%) were significantly more common in the nizatidine group. Of the adverse events that occurred at a frequency of 1% or more, there was no statistically significant difference between Axid and placebo in the incidence of any of these events (see package insert for complete information).

A variety of less common events were also reported; it was not possible to determine whether these were caused by nizatidine.

Hepatic—Hepatocellular injury (elevated liver enzyme tests or alkaline phosphatase) possibly or probably related to nizatidine occurred in some patients. In some cases, there was marked elevation (>500 IU/L) in SGOT or SGPT and, in a single instance, SGPT was >2,000 IU/L. The incidence of elevated liver enzymes overall and elevations of up to 3 times the upper limit of normal, however, did not significantly differ from that in placebo patients. All abnormalities were reversible after discontinuation of Axid. Since market introduction, hepatitis and jaundice have been reported. Rare cases of cholestatic or mixed hepatocellular and cholestatic injury with jaundice have been reported with reversal of the abnormalities after discontinuation of Axid.

Cardiovascular—In clinical pharmacology studies, short episodes of asymptomatic ventricular tachycardia occurred in 2 individuals administered Axid and in 3 untreated subjects.

CNS—Rare cases of reversible mental confusion have been reported.

Endocrine—Clinical pharmacology studies and controlled clinical trials showed no evidence of anti-androgenic activity due to nizatidine. Impotence and decreased libido were reported with similar frequency by patients on nizatidine and those on placebo. Gynecomastia has been reported rarely.

Hematologic—Anemia was reported significantly more frequently in nizatidine than in placebo-treated patients. Fatal thrombocytopenia was reported in a patient treated with nizatidine and another H₂-receptor antagonist. This patient had previously experienced thrombocytopenia while taking other drugs. Rare cases of thrombocytopenic purpura have been reported.

Integumental—Urticaria was reported significantly more frequently in nizatidine- than in placebo-treated patients. Rash and exfoliative dermatitis were also reported.

Hypersensitivity—As with other H₂-receptor antagonists, rare cases of anaphylaxis following nizatidine administration have been reported. Rare episodes of hypersensitivity reactions (eg, bronchospasm, laryngeal edema, rash, and eosinophilia) have been reported.

Other—Hyperuricemia unassociated with gout or nephrolithiasis was reported. Eosinophilia, fever, and nausea related to nizatidine have been reported.

Overdosage: Overdoses of Axid have been reported rarely. If overdosage occurs, activated charcoal, emesis, or lavage should be considered along with clinical monitoring and supportive therapy. The ability of hemodialysis to remove nizatidine from the body has not been conclusively demonstrated; however, due to its large volume of distribution, nizatidine is not expected to be efficiently removed from the body by this method. PV 2093 AMP [101591]

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A Powerful Voice for Women's Health

Minnesota Medicine interviews Doris C. Brooker, M.D.

Women are increasingly demanding equal treatment in the doctor's office. They are joining physicians, researchers, and others in calling attention to women's health issues and the need for more research on such illnesses as breast cancer and cardiovascular disease. Recent studies document that not only is research on women's health lagging behind that on men's health, but, in some instances, women's medical complaints are taken less seriously than men's, even when their symptoms are similar. Additionally, women tend to receive less intensive medical care than men do. For example, women are also half as likely as men to undergo cardiac catheterization and less likely to undergo bypass surgery or balloon angioplasty.

Doris Brooker, M.D., an ob/gyn pathologist specializing in women's health at the University of Minnesota, is working to improve women's health in the state. Dr. Brooker, the governor's staff, and Commissioner of Health Marlene Marschall have created a women's health task force to advise the health commissioner.

The goals of this bipartisan task force will be to consider women's health problems, set priorities, and recommend solutions for the state. Education and information dissemination are key components of the initiative.

Dr. Brooker, who is also chair of the Minnesota Medical Association's Committee on Women Physicians, believes that participation in organized medicine provides a powerful voice for women's health issues. In this month's interview, she says the MMA led the way for the American Medical Association and other groups when it formed the Committee on Women Physicians in the early 1980s. Women are now involved in organized medicine in all areas of the state and in every specialty, according to Dr. Brooker, who emphasizes the leadership role Minnesota women physicians have played in the AMA, as well as more locally.

Dr. Brooker believes we must strive for equality in women's health care but says we should avoid getting caught up in negative images of the past. Women's health has come a long way in recent years, and it's important that we continue moving forward, she says.

Minnesota Medicine: Dr. Brooker, let's start with your background. Where did you go to medical school, where did you do your residency training, and how did you end up in your current position?



Doris C. Brooker, M.D.

"Let's move ahead and make things happen equally."

Brooker: I am from Milwaukee, Wisconsin, and I went to the Marquette University School of Medicine. I did my residency training in pathology in a Harvard program, and I did a post-doctoral fellowship at Johns Hopkins University in the ob/gyn department. My last training was in clinical pathology here at the University of Minnesota, where I accepted a position in 1975 and now have a joint appointment in the Department of Laboratory Medicine and Pathology and the Department of Ob/Gyn. I am a pathologist specializing in women's health. My research currently focuses on quality assurance in obstetrics and women's cancer and on infectious disease in ob/gyn.

Organized Medicine's Voice

Minnesota Medicine: You are chair of the Minnesota Medical Association's Committee on Women Physicians. Tell us a little about the committee.

Brooker: I have been part of that committee intermittently for the past 10 years. The MMA led the way for the American Medical Association and other groups in allowing those of us who are interested in women's issues to express ourselves through organized medicine. The committee was formed in the early 1980s. The Minnesota Medical Association is our voice on women's issues in all areas of medicine, including such issues as pregnancy and maternity leave, violence and abuse, and research on women's health. We've been lucky in Minnesota that we've had a voice and we've been listened to. I encourage women physicians to get involved. I realize young men's and young women's lives are very busy—many women physicians have several different roles and a lot of time constraints—but if they choose to get involved, there is ample opportunity in this medical association. It is critical that we all be involved, even in a limited role.

Minnesota Medicine: As a member of the American

Academy of Pediatrics, I know that half of all pediatric residents are currently women. The AAP's membership is now about one-third women, and the last president was a woman. How involved are women in Minnesota's medical societies?

Brooker: We now have four women physicians who are presidents of local medical societies in Minnesota and three or four who are officers. There are about 2,200 women physicians in Minnesota, including about 1,200 in Hennepin and Ramsey counties, 100 in Twin Cities suburbs, 350 in Olmsted County, and 50 in St. Louis County. The other approximately 450 are in Greater Minnesota, so women are represented in every area of the state and in every specialty. About half the state's women physicians are involved in organized medicine. Women physicians are increasingly branching off into areas other than psychiatry, pediatrics, and ob/gyn—the specialties that have traditionally attracted women physicians. We are particularly proud of the contributions of Dr. Peggy Craig, the first woman president of the MMA and now a University of Minnesota regent, and Dr. Audrey Nelson, who is on the Mayo Clinic board and is a long-time AMA delegate.

Minnesota Medicine: Do you think greater numbers of women physicians will improve women's health generally and increase the attention paid to women's health issues?

Brooker: I would like to believe that men and women physicians complement each other in their care of women. Women's health issues are not exclusively the responsibility of women physicians. In Minnesota, some of the foremost women's health advocates are men. A good example of women's health advocacy is Gov. Arne Carlson's public statement in August that violence against women is an issue society as a whole must address in attitude and dialogue.

New State Task Force on Women's Health

Minnesota Medicine: You have been involved in a state effort to draw attention to women's health issues. What can you tell us about this effort?

Brooker: As you know, health care reform has emerged as an important issue in Minnesota and elsewhere. I have joined many others in suggesting ways of making health care more accessible and cost effective. Last summer, the governor's staff expressed a strong interest in forming a women's health advisory task force. This is now a reality. An advisory task force to the commissioner of health will be created to consider women's health issues and recommend solutions. The advisory group will be composed of physicians and other health professionals who daily listen to the problems of women. It will be a unique voice for women in Minnesota. The core group will be women in medicine, including physicians, nurses, technologists, physical therapists, psychologists, midwives, and nurse clinicians. Interest in, experience with, and knowledge of the issues and how to solve them will be the factors used to choose the task force members. We don't want to make the group exclusive to health care providers; a great number of other women professionals will be part of this task force—legislative, judicial, managed care, and business representatives, for example. In fact, the women's health task force will include men. The National Women's Political Caucus has been successful, and it has many male advocates from Congress. Women exclusively providing women's health is not the focus we want.

Improving access to health care and the quality of care for women patients is the priority of this group. Consumers—women patients—will have the most important voice in this task force. I know of no better way to ensure success in this effort than to empower women with knowledge about health issues important to them. This is my bias as an educator and teacher.

An Assessment of Women's Health—As Compared with Men's

Minnesota Medicine: Women's health has been the focus of many medical articles lately in such journals as *JAMA* and *The New England Journal of Medicine*. How has women's health changed in recent years?

Brooker: In the past few decades, women's health has changed dramatically. We've seen, for example, significant improvements in cancer survival, fertility, and

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survival rates of mothers and neonates since 1940. Hormone therapy is one example of how women's health has changed in terms of medical treatment. Women were taught 20 years ago that estrogen and hormone therapy might be dangerous and cancer producing, so use was limited. Today, we have more data showing that, in fact, cardiovascular disease is a much more likely cause of death for women than breast cancer or endometrial cancer. We can now screen women's risk status and watch for complications from hormonal therapy, which is absolutely necessary for preventing osteoporosis and maintaining cardiovascular health. Women deserve the physical and psychological benefits of hormone-replacement therapy.

Minnesota Medicine: A number of other recent articles have discussed gender disparities in health care. One in particular talks about differences in procedures used for women and men hospitalized for coronary artery disease. I think it comes as a shock to a lot of physicians that they may not have taken care of women as well as they've taken care of men. How do you feel about this?

Brooker: Awareness of gender disparities in medicine started with the National Women's Political Caucus about five or six years ago. That group generated significant interest in the issue. The National Cancer Institute, the National Institutes of Health, and the Institute of Medicine followed with important information about discrepancies in research and funding of women's health concerns, such as breast cancer. It has also become clear that we need to include women in studies of cardiovascular disease. We need more research on which hormonal medications and what combinations will help prevent cardiac disease in women while presenting the least risk of cancer. Men certainly have a preponderance of morbidity and mortality from this disease, but as women age and lose estrogen, they lose protection and their risk becomes greater.

Medicine evolves as issues evolve. I think it's helpful to look at the past, but I don't want to compromise our future by criticizing the past. What's important is to develop a bank of information from credible research evaluations. There has already been a lot of progress in women's health; however, I don't want to de-emphasize the fact that there have been inequities in women's health as compared with men's. We must learn from the past, but let's move ahead and make things happen—and happen equally.

Women, Children, and AIDS

Minnesota Medicine: AIDS is another illness more typically associated with men, but it's becoming a significant issue for women. By the year 2000, the number of women with AIDS worldwide is expected to equal that

of men. Do you have any comments on this?

Brooker: By December 1, 1991, 163 women in Minnesota had been recognized as HIV seropositive; 40 of them actually had the disease. The university's ob/gyn department has just organized a task force to address some of the problems faced by these women and develop a strategy to assist Minnesota physicians who are treating women with AIDS. These women have a greater risk for cancer, for pregnancy loss, and for many other problems, and it is our responsibility to provide quality care and education about prevention of this disease.

Minnesota Medicine: AIDS among teenagers is also a serious concern. What can physicians do about the problem?

Brooker: I believe young men and women are very open to information from physicians and other adults, as well as their peers. It's important that we provide correct information about sexually transmitted diseases and birth control and, especially, use of condoms. It's a serious and ongoing challenge for physicians to educate young people, who are susceptible to misinformation. I think we also need more funding for adult education about sexually transmitted diseases and family planning. We all need to be more aware of AIDS and the need for protection. The public expects medicine to take a leading role in education and public protection.

Minnesota Medicine: Often the most vulnerable populations tend to reject advice.

Brooker: Peers and sports figures, such as Magic Johnson, often have the greatest influence on teens, but physicians and other people they respect also have influence, and I believe we have a responsibility to exert our influence. We must help parents and our educators deal directly with this problem.

Minnesota Medicine: In closing, do individual physicians also have a responsibility to improve women's health?

Brooker: I believe any successful effort must begin with individual initiative. Each of us has our advocacy and our priorities. Women's health issues involve many aspects of medicine and its specialties. Improvement will come gradually as each physician practices with the new knowledge he or she accepts as credible. Organized medicine will play a role in changing medical practice for the better by focusing on these issues.

MM

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Learning About Real Medicine and Real Life

Beth Olsen

Editor's Note: As a third-year medical student participating in the University of Minnesota's Rural Physician Associate Program, Beth Olsen spent nine months in Willmar, Minnesota, living in the community, studying, and working alongside practicing rural family physicians. Following is an essay she wrote at the conclusion of her RPAP experience. When the program's Interim Director Walter Swentko, M.D., sent us the paper, he wrote, "The essay captures some of the magic and mystery, the joys and pains, of learning about medicine."

While working as a rural physician in Willmar, Minnesota, through the Rural Physician Associate Program, I rediscovered the reason I chose to study medicine. I had lost track of it as a medical student studying chick wing bud experiments, anti-microbials, glycolysis, and the treacherous twists and turns of cranial nerve number 7. Even my first clinical rotations lost their glamour after I discovered it was my job to determine what every patient's potassium was doing, to locate Mrs. P's misplaced CT scan, to find out whether the nurses' station had any caffeinated coffee, and to hunt for the missing 30-gauge needles.

While on clinical rotations, I did connect more personally with one man and his family from Virginia, Minnesota. Alfred was a wonderful man whose body was dying of metastatic lung cancer. Why, then, did I shed only a few tears when I hugged him and turned to his family to say goodbye? (Why not a whole Kleenex full? Good grief, I sobbed when E.T. was going home!) Apparently, I had already learned to become detached after 10 weeks of clinical experience. I hope he didn't see it. Oh, I had concern and compassion (much more than my resident), but I didn't take the time to stop and think of Alfred again—until I met Walter during my Rural Physician Associate Program (RPAP) experience.

Like Alfred, Walter was experiencing shortness of breath. We gave him a sack of inhaler samples to stop the problem, which stemmed from a soon-to-be-detected cauliflower growth in his right mainstem bronchus.

One evening when Walter was in the hospital, he and his wife called me into his room and began asking me questions about how to take prednisone. The conversation turned to other topics—what western Nebraska wind was like in the winter, how many cows, how many

acres, why did I want to be a doctor, and had I ever seen the sandhill cranes along the North Platte River? I sat patiently on the corner of his bed, and we shared stories about the loss of limbs. A grain auger had stolen my dad's arm, and a war had claimed Walter's. We chuckled, reminiscing about times when children had stared and pointed to "Captain Hook."

I made more time to spend with Walter than I had with Alfred; I had the time to follow Walter's course over months, not days. I began to make sense of dignity—of individuality. I began to understand what to fight for and what to leave to God. I truly came to realize why Alfred had wanted to escape the metropolitan hospital without radiation treatment and return to Virginia, where the leaves were already changing to gold.

Detachment is undoubtedly needed in medicine—especially in emergency situations. At times it can be more important to sort the stack of Advanced Cardiac Life Support algorithms and plunge needles into collapsed veins than to recognize confusion, panic, and fear. Acknowledging the feelings that both you and the patient possess, however, is what RPAP is about.

Going back and forth between compassion and detachment is tough. Physicians tend to feel more comfortable playing it safe. We inadvertently learn detachment. We forget that a human being is in front of us, not just a Great Cause or a Pathetic Case. It's easy for most physicians to talk about the broken hip in room 323 or the melanoma in 456. It's hard to talk about the evasive, capricious areas of human life.

When I saw a young woman in the clinic with signs of an impending spontaneous abortion, I had to tell her what was happening inside her body. Yes, I gave a somewhat technical explanation, but I also was able to blend in sensitivity, true concern, and attentive listening. I was mad that night, as I lay sleepless, wondering if she was bleeding to death in a Chevy on the way to Fargo (she had decided to go to her parent's home and not stay close to the hospital, as I had suggested). No other medical student at the University of Minnesota was spending her valued sleep contemplating what she would say to a jury. Although I eventually realized I was being overdramatic and unreasonable, I still couldn't rest—mostly because I knew this wouldn't be my last sleepless night. What problems would some of my future patients have? Would uncertainty and restless nights forever be part of my work?

The phenomenon of disease brings disbelief and horror to patient and physician. But where in medical

school did my preceptors sit down with me and discuss the suffering, the loneliness, or my own inadequacy—constant companions of my chosen profession? Chemotherapy, surgery, and large metropolitan hospitals can't fix everything. My RPAP physician-teachers, Drs. Michael Morris, Lyle Munneke, and Kevin Switzer, answered my questions. They added to my armamentarium, which now includes more than just procedures and therapeutics. I found family care at its finest. I also allowed myself to confront my own fear of death, something that had been so easy to ignore.

No, I wasn't "pimped" as much as some of my colleagues, and no, I never got to those noon conferences on Sézary's syndrome or the different types of human papilloma virus. Yet, I learned about these things because I had time and easy access to journal articles and textbooks. I wasn't always struggling over progress notes or that damn potassium, or waiting my turn to sneak a peek at the operating field. The Rural Physician Associate Program allowed me to learn real medicine and real life. I couldn't ask for more. MM

Beth Olsen is a fourth-year medical student at the University of Minnesota and is from western Nebraska, where, she tells us, her parents (her biggest supporters) still reside.

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Chris Norton wasn't worried about breast cancer. The 45-year-old English teacher from Cottage Grove, Minnesota, had no family history of the disease and she never skipped her regular mammogram, so she was surprised a year ago when she felt a lump in her breast. Norton immediately had another mammogram, but the test

failed to diagnose the lump as cancer. Her shock quickly turned to anger when, six months after her discovery of the lump, a biopsy revealed that it was malignant and she underwent a mastectomy. Today, Norton has turned anger into action by organizing the Minnesota Breast Cancer Coalition's letter-writing campaign.

Minnesota physicians may find that more of their patients are becoming politically active in women's health issues. The goal of Chris Norton's letter-writing campaign, "Do the Write Thing," was to deliver 175,000 signatures to Washington, D.C., requesting more research on breast cancer. The 175,000 signatures represent the number of new breast cancer cases anticipated for 1991. Although Minnesota's goal was 3,000 letters, 9,000 letters were written. Nationwide, 600,000 were sent.

Kim Sundet attributes this increased activism to the fact that women with breast cancer are now diagnosed earlier, at a younger age. Sundet is a program manager for ENCORE/Women's Health Promotion, which is part of the Minneapolis YWCA. The organization serves primarily as a support group for breast cancer patients. Women who grew up during the political activism of the '70s are likely to continue their campaign of activism, but in other directions, says Sundet. "Younger women are more likely to demand attention to these issues. They want to see their children grow up."

Physicians are also gathering political forces to bring women's health issues to the forefront. On a national level, Nancy Dickey, M.D., trustee of the American Medical Association, speaks across the country about the need to allocate more money for research on women's diseases.

Political activism is not limited to breast cancer. Heart disease, osteoporosis, and Alzheimer's, as well as breast cancer, were all discussed at an April 19, 1991, hearing of the Senate Subcommittee on Women and Aging convened by Sen. Brock Adams, D-Wash. Speakers testified that women across the country are disadvantaged in medical research, diagnosis, and treatment.

RESEARCH: WOMEN ARE NOT EQUALLY REPRESENTED

The disparities begin with research, reported Dickey at an October 25, 1991, conference on medicine, law, and ethics at St. Olaf College in Northfield, Minnesota, where she spoke of women's historic underrepresentation in research trials.

Consider the U.S. Physicians Study. This pioneering study of 22,000 male physicians showed that aspirin reduces heart attack risk in men by 44 percent. Thus far, she said, there has not been a comparable definitive study that measures whether the prophylactic use of aspirin



ILLUSTRATIONS BY LINDA FRICHTEI

also reduces the risk of heart attack in women. Correctly or incorrectly, the Physicians Health Study results are extrapolated to women.

Researchers often exclude women from study protocols because of concern over medical and legal risks. Should a woman of childbearing age become pregnant while on an experimental drug, the fetus might be adversely affected. Scientists also worry that confounding, cyclic hormonal factors would not permit a reliably controlled study, so they simply leave women out. Dickey argued that it is precisely because of the need to measure hormon-

al variables that women must be included in such studies. As another example of unequal treatment, she cited an antidepressant drug study conducted only on men, even though women experience higher rates of clinical depression.

Finally, Dickey said, women have not received their fair share of research dollars. Breast cancer, which strikes 11 percent of U.S. women, is phenomenally underfunded, she said. That wouldn't be the case if the tables were turned and the disease affected men; instead, there would be an unending flow of research dollars, testified one speaker at the Senate subcommittee hearing chaired by Sen. Adams.

TREATMENT INEQUITIES: THE YENTL SYNDROME EXISTS IN MEDICINE

Bernadine Healy, M.D., director of the National Institutes of Health, called such gender disparities the "Yentl syndrome" in the June 25, 1991, *New England Journal of Medicine*, borrowing the phrase from Isaac Bashevis Singer's story about a woman who pretends to be a man in order to achieve equality. In the doctor's office, the Yentl syndrome means that women's complaints are not taken as seriously as men's, even when their medical symptoms are similar.

At first glance, it appears that because women undergo more examinations and receive more tests and prescriptions than men, they use more than their fair share of medical resources, reports the AMA Council on Ethical and Judicial Affairs in the July 24, 1991, *Journal of the American Medical Association*. But women have less access to high-tech medicine, as indicated by the smaller percentage of women receiving kidney transplants. Women with end-stage renal disease are far less likely than men to receive a kidney transplant. In the

group aged 46 to 60, women are half as likely as men to receive a transplant.

The AMA authors speculate that medical disparities result from society's stereotype that men's social worth is greater than women's. Doctors may assume that in contrast to a woman, a working man—the breadwinner—would be greatly inconvenienced by the cumbersome process of dialysis and would benefit more from a kidney transplant because it would allow him to return to work quickly.

Heart disease: women receive unequal care

This “breadwinner” psychology may also account for the gender differences in treatment of cardiovascular disease, reported two articles in the July 25, 1991, *New England Journal of Medicine*. These studies, which involved thousands of patients, showed that women are half as likely as men to undergo cardiac catheterization and far less likely than men to undergo bypass surgery or balloon angioplasty to unclog blocked arteries.

The treatment differences were evident despite the fact that many of the women patients had more advanced heart disease than the men. “These findings demonstrated that women who are hospitalized for coronary heart disease undergo fewer major diagnostic and therapeutic procedures than men,” wrote John Ayanian, M.D., and Arnold Epstein, M.D., of Harvard Medical School, authors of one of the studies.

Shortly following these disclosures, the November 13, 1991, *New York Times* revealed yet another gender gap. A study reported at a November 12 meeting of the American Heart Association showed that out of 5,000 men and women treated for heart attacks, men were twice as likely as women to receive newer, life-saving treatments such as streptokinase and tissue plasminogen activator. These reports confirmed what many women have long suspected: women are less likely than men to get equal consideration of their health needs.

The breadwinner psychology has a historical and medical basis. Thirty years ago, if a man in his late 30s or early 40s died of heart disease, people assumed he left a wife and children behind, says Mayo Clinic cardiologist Thomas Kottke, M.D. Clinical studies confirmed that men were dying of heart disease at a much younger age than women. For example, a 1950 to 1982 Mayo

Clinic study on heart disease rates for men and women indicated that age-adjusted heart disease rates were about twice as high for men as for women. If a doctor sees both a 50-year-old man and a 50-year-old woman with chest pain, the woman is half as likely to have heart disease, says Kottke, adding, “The doctor is trained not to chase after rare diseases.”

Younger women do have an advantage over men in cardiovascular disease, but women's disease risk begins to rise after menopause, when estrogen levels fall. After menopause, women's risk of heart disease approaches that of men. Still, it is viewed as a “man's disease,” even though it is the leading cause of death in women. Of the more than 520,000 people who die from heart attacks each year, approximately 247,000 are women.

Now demographics are shifting. Researchers are facing an aging population. Women are living longer, and age is a key risk factor for women. One in nine women aged 45 to 64 has cardiovascular disease, but the ratio narrows to one in three after age 65. In Rochester, says Kottke, “four out of five 80-year-olds are women, and people in their 80s die.”

The increased numbers of older American women may invite another subtle form of gender discrimination, says Nancy Jecker, Ph.D., in a December 4, 1991, *JAMA* article. The aging of America, together with the drive to control health care costs, is pushing age-based rationing, Jecker argues. On the face of it, these measures are not expressly designed to discriminate against women, but given the larger number of women than men over the age of 80, they may indirectly affect women more than men.

In the doctor's office, says Valerie Ulstad, M.D., a University of Minnesota cardiologist, women who complain of chest pains are evaluated differently than men. Physicians often underestimate the severity of heart disease in women, attributing chest pain to anxiety or boredom. Men with chest pain are immediately assumed to have heart disease. This sentiment, said the AMA's Dickey, is consistent with what was once taught in medical schools—that women's health care overwhelmingly involves issues of emotion and overanxiety as opposed to physiology.

One problem, says Ulstad, is that without detailed studies, no one knows for certain what the best medical approach is for women with suspected or confirmed heart disease. She pointed out a number of differences in



both test results and therapies for men and women:

- Treadmill tests give different results in women. In the standard treadmill tests, women have more false positives.

- Thrombolytic therapy has been worked out for men but not for women. Data from men have simply been extrapolated for women's smaller body size.

- For reasons unknown, coronary bypass surgery is associated with a higher mortality rate for women than for men. Does the higher rate suggest that this procedure is less effective for women? Is it that women are older and consequently have more advanced disease at the time of surgery? Is it because women's arteries are smaller, thus making surgery more difficult?

What we do know is that cardiovascular disease is the leading killer of both men and women older than 60.

"The problem is to convince both the lay and medical sectors that coronary artery disease is also a woman's disease, not a man's disease in disguise," said Healy.

Breast cancer: women are confused

Naturally, breast cancer is not viewed as a man's disease in disguise. Breast cancer primarily affects women—and in increasing numbers. The incidence rate reported by the National Cancer Institute increased by an average of 5 percent per year from 1984 to 1987.

As with cardiovascular disease, demographic shifts contribute to rising breast cancer rates, and two radical changes have increased women's risk. One is delayed childbearing, which increased significantly over the last decade. Childbirth after age 30 approximately doubles a woman's breast cancer risk over that of women who have children when they are younger than 20, explains James Ingle, M.D., an oncology consultant at Mayo Clinic. Another is our aging society. The longer women live, the greater their chance of acquiring breast cancer. In 1900, there were 4,890,000 women over the age of 50; in 1990, there were 35,677,000.

Researchers and activists call attention to alarming statistics:

- In 1991, there will be 175,000 new cases of breast cancer in the United States, according to the American Cancer Society.

- One in every nine women will develop breast cancer during her lifetime, and one of every 13 women will die of the disease. (Minnesota cancer rates reflect the national average.)

Ironically, the growing numbers—1.6 million new



cases of breast cancer predicted by the end of the decade—are due, in part, to breast screening programs and educational efforts of the American Cancer Society and other organizations, says Ingle. Mammography screening is on the rise. A National Cancer Institute study shows that in 1990, at least 64 percent of women had one mammogram, up from 37 percent in 1987.

But despite the success of mammography screening in detecting breast cancer early, the procedure is not without problems, as Chris Norton discovered. Substandard equipment, untrained technicians, and inexperienced radiologists result in a 31 percent failure to image the breast properly, according to findings presented at a February 1991 hearing of the Senate Subcommittee on Women and Aging called, "Improving the Quality of Mammography: How Current Practice Fails." During the hearing, Sen. Adams expressed concern that the potential profits from the millions of mammograms covered by private insurance and Medicare will bring a proliferation of low-cost, low-quality machines. Making matters worse, there are no federal standards to guarantee that mammography is safe and accurate. Although the American College of Radiology established quality standards for accreditation in 1987, today—four years after the start of the program—only one in four facilities is accredited. In 1991, only nine states passed legislation to assure quality. Minnesota was not among them.

Again, there's the problem of research. A lack of

conclusive studies on heart disease and breast cancer results in conflicting medical information that often pits prevention of cardiovascular disease against breast cancer prevention. Take, for example, the findings reported in an April 17, 1991, *Wall Street Journal* article citing a Centers for Disease Control report that links estrogen with breast cancer: "Women who took estrogen for 15 years were 30 percent more likely to develop breast cancer," the article states.

Clearly, this information would discourage women from taking estrogen; yet, hormone-replacement therapy is commonly prescribed to prevent osteoporosis, heart disease, and other postmenopausal problems. Are women being forced to choose between preventive medicine for one disease at the risk of developing another? Because of the paucity of research, no one appears to know, and women are confused.

"Women are afraid of dying of breast cancer, but they really should fear coronary artery disease," says the university's Ulstad. In 1991 an estimated 44,500 women were expected to die of breast cancer and 500,000 of heart disease.

AIDS: women's risk grows

If women are now most concerned about cardiovascular disease and breast cancer, they may soon shift their attention to AIDS. In their race toward equality with men, women are, unfortunately, reaching equal status in HIV infection.

The number of women with AIDS in 1990 increased 29 percent from the previous year, said Surgeon General Antonia Novello, M.D., in a report to the American Public Health Association. By the year 2000, she said, the worldwide number of women with AIDS will equal that of men. The October 23, 1991, *Journal of the American Medical Association* reports that an estimated 3 million women worldwide will die of AIDS in the 1990s. Among women of color in New York and New Jersey, AIDS is already the leading cause of death. In Minnesota, the number of women with AIDS is still small—40 as of December 1, 1991. But a spokesperson for the Minnesota AIDS Project said that, like the national figures, the number of HIV-infected women is likely to grow, particularly among women of color.

Recognition of the risk AIDS poses to women has been slow, and more work must be done on the manifestation of HIV in women, according to an October 23, 1991, *JAMA* article. "Because of our failure to focus on women earlier in the course of the epidemic, there are significant gaps in our knowledge about HIV disease in women," wrote M. Roy Schwarz, M.D., in a letter to CDC Director William Roper, M.D. Schwarz, AMA senior vice president of medical education and science,

praised CDC's call for further research on HIV in women in the April 1991 issue of the CDC's HIV/AIDS prevention newsletter, adding that the AMA would "happily support this progress in whatever way possible."

POLITICAL ACTIVISM IN THE '90S

In an effort to garner more government research funds, women throughout the country are looking to AIDS activists as political role models. "Women are angry," says ENCORE's Sundet. "Over and over again, I hear how the health care system is not meeting their needs." But will Minnesota women follow the AIDS activists and chain themselves to fences as ACT-UP (AIDS Coalition to Unleash Power) members have done in California? No, predicts Shirley Williams, a clinical nurse specialist at St. Paul-Ramsey Medical Center. "Scandinavian women are more polite. In Minnesota, the approach to breast cancer is more traditional—self-examination, mammography, and regular visits to a physician."

Nonetheless, Minnesota physicians can expect to see more political activism. ENCORE and the newly organized Minnesota Breast Cancer Coalition are planning a conference to be held October 16, 1992, at Minneapolis Community College. Kim Sundet said the conference will bring together policymakers, health care providers, and women who have had cancer to consider how to make the system work better. These groups are also considering printing and distributing posters that talk about stopping the "epidemic" of breast cancer, investigating specific research projects and supporting those they believe look promising, and perhaps conducting more fund-raising for breast cancer research.

Meanwhile, Norton plans to continue her political activity, as well. Having had breast cancer herself, she is worried that her daughter has a higher risk of contracting the disease. One of Norton's goals is to plan a Minnesota rally to promote awareness of breast cancer and to encourage politicians to allocate additional research dollars for the disease. Breast cancer activists point out that since 1980, breast cancer has taken four times as many lives as AIDS; yet, the National Cancer Institute estimates that in 1991, \$90.2 million was spent on breast cancer research compared

with \$160 million for AIDS.

Political activism in health care is not new. Although political pressure focuses needed attention on medical inequities, it can also lead to polarization of scarce medical dollars, said Dickey at the St. Olaf conference. While she supports women's health initiatives, she said distributing research dollars equitably is a problem.

"Money is directed to people who have used the political process and brought their issue to the attention of politicians and the public. It means that if you create

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funding."

—Nancy Dickey, M.D.

enough noise, your disease may get funding," she explained. "There may be equally large numbers of people who don't have a voice, who do not have as 'sexy' a disease, and they remain unfunded."

NEW RESEARCH INITIATIVES

Nationally, political pressure has begun to pay off for women. In September 1992, 140,000 women will take part in a \$500 million NIH study of cancer, cardiovascular disease, and osteoporosis—common disorders in older women. About 50 centers will be chosen for the study's first phase, which will follow postmenopausal women for nine years. The second phase will examine community-based health promotion programs in 40 communities. The goals are twofold: to evaluate the effectiveness of unproven approaches such as hormone-replacement therapy and low-fat diets to reduce the risk of heart disease and cancer, and to find out why women do not always take steps to live healthy lifestyles, even when the information they need is available.

Other studies on the table address the gender gap. Anticipating the need for more information about HIV-infected women, the Centers for Disease Control recently called for expanded HIV research projects that focus on women. One proposed CDC project will examine how the human immunodeficiency virus in women differs from HIV in men and how social factors, such as family structure, access to health care, and cultural values, affect women already infected with the virus.

Closer to home, James Ingle reports that the Mayo Clinic has begun a randomized study on the effectiveness of autologous bone marrow transplantation in breast cancer patients, an experimental procedure that costs \$150,000. Even though there has been considerable publicity on bone marrow transplantation, the procedure is still investigational, and patients must be aware that its value is as yet undetermined, he cautioned.

THE PHYSICIAN'S ROLE IN BRIDGING THE GENDER GAP

These studies will have enormous importance for the future of women's health. The results of the new NIH initiative will enable physicians to improve women's health dramatically in the next century, says William Harlan, M.D., director of the study.

Meanwhile, until the research results are in, physicians themselves can begin to narrow the medical gender gap. First, the AMA recommends, physicians should examine their own attitudes about gender bias and discard any assumptions they might have about the relative social value of women vs. men. The AMA also suggests that physicians take steps to support women in leadership roles in teaching, research, and medical practice.

With gender issues on the political forefront, Healy says she hopes that "Yentl will survive, but her syndrome will slip back into history as a curiosity of times gone by."

MM

Beryl Byman is a free-lance writer and independent radio producer living in Rochester, Minnesota.

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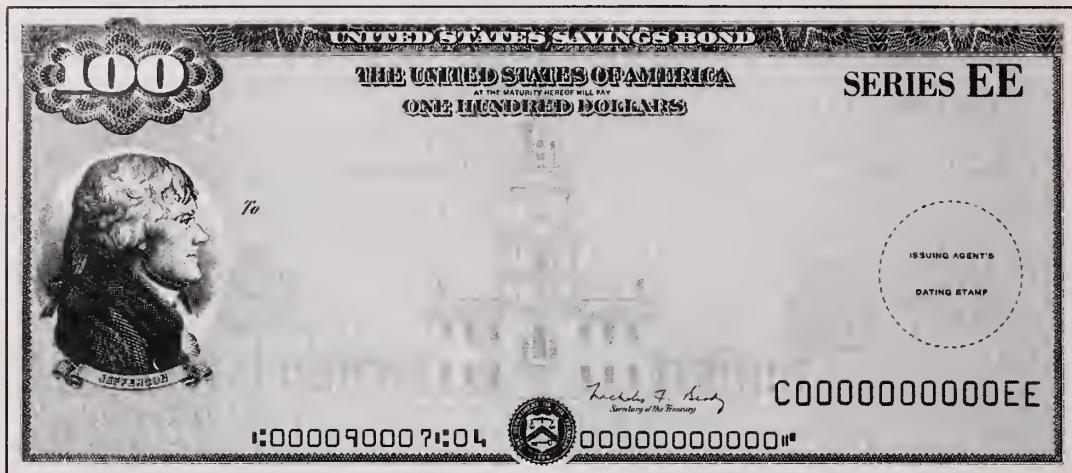
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Film: Prescribing Controlled Substances

A new film on the prescribing of controlled substances has been made available by the Minnesota Medical Association. This videotape, which was the subject of a recent seminar series, examines the appropriate use of benzodiazepines and narcotic pain medications and emphasizes the elements of a proper medical record. The film has been reviewed and is acceptable for one hour of prescribed credit by the American Academy of Family Physicians. For further information or to order the film, please call Vicki Westling at the MMA, 612/378-1875 or 800/999-1875. A \$10 fee is charged per showing to cover shipping and handling expenses.



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MMA Grapples with Health Care Reform

Minnesota Medical Association Legislative Staff

The growing number of uninsured in the United States is a severe problem. Even though Minnesota has a relatively small number of uninsured citizens compared with the rest of the nation, the Minnesota Health Care Access Commission found that 370,000 Minnesotans go without insurance all or part of any year. That means 8.6 percent of the state's population goes without access to needed health care.

The Minnesota Medical Association has worked closely with policy-makers over the past two years to formulate a program that would provide good, accessible care to all Minnesotans. Many MMA members have devoted tremendous amounts of time to the development of a program that would offer all Minnesotans access to health care that is compatible with our current health care delivery system. In 1990, the Minnesota Medical Association House of Delegates issued a resolution stating that access to basic health care is a right of all Minnesotans.

In November 1991, the MMA Board of Trustees adopted the "MMA Principles for Health Care Reform." This paper outlines the eight principles, which call for necessary reforms in health care delivery, insurance underwriting, public health education, rural health, and state financing. It is the intent of the MMA that these principles guide the development of comprehensive health care access legislation in Minnesota.

History of the Problem in Minnesota

The problem of Minnesota's uninsured emerged as a predominant legislative issue after the Minnesota Health Care Access Commission published its report in January 1991. The commission found that 370,000 Minnesotans were without health insurance and that another 366,000 had purchased coverage with high deductibles and copays that proved to be a barrier to receiving care.

The commission also found that of the 370,000 individuals without coverage, 28 percent delayed seeking care even though they thought it was needed. For those who delayed care, 70 percent said it was for a "very serious or somewhat serious" problem, and 84 percent said the delay was due to cost.

As a result of the Health Care Access Commission's report, Rep. Paul Ogren, DFL-Aitkin, and Sen. Linda

Berglin, DFL-Minneapolis, introduced House File 2/ Senate File 2 in 1991. This was referred to as the Health Care Access bill.

This legislation proposed the Minnesotans' Health Plan, a state program that would have provided subsidized coverage for individuals earning below 275 percent of the federal poverty level. (At that time, 275 percent equaled \$34,947 for a family of four.) In addition, the bill called for greater use of outcomes data to develop practice parameters, changes in other state health care programs, use of managed care throughout the state, creation of a state office of rural health, and drastic reforms in private insurance underwriting.

The Minnesota Medical Association worked very closely with legislative leaders to ensure that the final solution would truly provide access. The legislation was passed at the end of the 1991 Legislative Session, only to be vetoed by Gov. Arne Carlson because of concern that the funding source was not adequate for future growth and that the bill provided a false hope of "universal" coverage.

The 1992 Legislative Session begins January 6, 1992, and health care access will again be a prominent issue. There may be attempts to override the governor's veto of House File 2, and numerous other proposals are on the table. The governor, the HMO Council of Minnesota, and the Insurance Federation of Minnesota have each proposed plans for health care access reform. Each proposal addresses the problem somewhat differently by putting varying emphasis on the public and private sectors.

The MMA's Principles of Health Care Reform

The Minnesota Medical Association's Legislative Committee, Executive Committee, and Board of Trustees reviewed all these proposals in detail. The MMA sought additional input through outreach meetings with county medical societies throughout the state. The clear message was that the MMA must be actively involved in finding a legislative solution.

In response, the Board of Trustees adopted the MMA Principles for Health Care Reform, which the organization intends to use in its lobbying efforts to promote health care access for all Minnesotans. The MMA be-

**"As patient advocates,
physicians must be
committed to ensuring
that all citizens have
access to basic
health care."**

believes these principles should be included in any health care access proposal. The principles stress universal access; obligations for the individual, the state, and the employer; cost containment; improved quality; meaningful insurance reforms; and an equitable, broad-based, dedicated funding source.

These principles, which follow, will require change in today's health care system. This may be hard for some people to accept; however, as advocates, physicians must be committed to ensuring that all citizens have access to basic health care.

ALL MINNESOTANS ARE ENTITLED TO A BASIC LEVEL OF HEALTH CARE.

- The MMA's Medical Benefits Task Force Report (adopted February 1991) should be used as a model for all health plans in both small and large markets.

- All health plans must emphasize preventive and primary services as an integral part of a total health care package.

INDIVIDUALS, EMPLOYERS, AND GOVERNMENT ALL HAVE AN OBLIGATION TO ENSURE ADEQUATE COVERAGE FOR ALL CITIZENS.

- Every citizen must be required to have coverage for basic health care.

- Appropriate mechanisms, such as copays, deductibles, and prior authorization, must be implemented to encourage patient responsibility and proper utilization of health care services.

- The state has an obligation to provide assistance on a sliding scale to low-income individuals who cannot afford coverage for basic health care.

- The state should provide tax incentives similar to those available to employers (e.g., deductions or credits) to individuals purchasing basic health care coverage.

- Employers should be encouraged through the use of additional incentives to offer basic health care coverage to employees and their dependents.

- The problem of the uninsured must be addressed through a societal solution.

REFORMS MUST BE IMPLEMENTED TO IMPROVE THE EFFECTIVENESS AND QUALITY OF CARE.

- Physicians and health researchers must continue to develop, analyze, and appropriately apply practice parameters and outcome data to enhance the quality of health care in Minnesota.

- To truly enhance quality, all data initiatives must be based on scientifically valid research and analysis, and the data collected must be considered private for individual patients and physicians.

- Professional medical organizations have important roles in coordinating and disseminating appropriate practice parameters as they are developed. The interests of the state and other public and private organizations must be balanced with the MMA's pivotal role in this endeavor.

- Peer review is an essential way to enhance the effectiveness of educational efforts and modify medical

practice. The MMA is committed to providing peer review services for physicians to improve practice methods and outcomes.

INSURANCE MUST BE PORTABLE FOR INDIVIDUALS CHANGING JOBS OR MOVING TO OTHER PARTS OF THE STATE.

- Health plans should establish premium rates for individuals and small groups on a carrier-specific, state-wide, community-rated basis. This allows risk to be spread among all insured individuals.

- Health plans must be prohibited from using pre-existing condition clauses or denying coverage based on health status. This is often the major barrier to portability and continuity in health care coverage.

- Health plans must be allowed to share risk through a reinsurance mechanism for those who were previously considered uninsurable.

COST CONTAINMENT MUST BE ACHIEVED WHILE MAINTAINING HIGH-QUALITY DELIVERY.

- The health care system must reduce administrative costs through a variety of mechanisms, including the establishment of standardized claim forms, billing procedures, and utilization review criteria.

- The state must review the issues and costs related to technology. Although increased technology has greatly enhanced medical care throughout the state, the remaining areas of duplication and excessive use of technology must be addressed. A Minnesota technology review committee must be established to review all issues related to the use of medical technology and make recommendations. This committee should be composed of physicians, hospital representatives, medical device manufacturers, purchasers, consumers, and ethicists.

- A system must be developed to facilitate cost-effective and appropriate utilization of prescription drugs.

- Managed-care techniques will continue to be used to achieve cost containment. These techniques are not limited to HMOs; they also can be implemented by individual clinics, by the state, through preferred-provider networks, or through indemnity plans.

- A multi-payer system must be maintained to preserve patient choice.

- The state must begin addressing the cost of health care associated with our tort system and defensive medicine. Any study of tort reform in Minnesota should include, but not be limited to:

1. Reasonable periodic payment awards,
2. Reasonable caps on non-economic damages,
3. Mandatory offsets for collateral sources of payment,
4. Payment of punitive damage awards to states for the improvement of health care,
5. Reasonable limits on attorney contingency fees, and
6. Expedited settlement provisions.

- The state must address issues related to the sharing of services and the antitrust implications for health care facilities.

GEOGRAPHIC ACCESS MUST BE ASSURED THROUGHOUT MINNESOTA.

• The establishment of an office of rural health within the Department of Health is essential to coordinating programs aimed at improving access, quality, and affordability of health care in rural Minnesota. This office should work in conjunction with the state's medical schools, nursing schools, the Minnesota Center for Rural Health, and other associations concerned with rural health issues.

• The state must develop programs to assist communities in need with the recruitment and retention of health professionals.

• The state must provide assistance to communities for local planning to assure continued geographic access.

PUBLIC EDUCATION AND HEALTH PROMOTION EFFORTS MUST BE EXPANDED.

• Additional funding should be given to the Department of Health to increase efforts in its health promotion and disease prevention division.

• We all must increase efforts to achieve a smoke-free society by the year 2000. A unified effort among the medical profession, the school systems, the media, and the Minnesota Department of Health is necessary to reduce the number of smokers.

• A massive educational campaign needs to be developed within the state and implemented through physicians' offices, hospitals, public health nurses, and the school systems to educate people about the appropriate use of the health care system and about available health care resources.

• The MMA and other health care organizations must intensify public health education efforts to create greater awareness and provide accurate information about such issues as drunken driving and alcohol abuse, sexually transmitted diseases, exercise, healthy diets, and use of motorcycle and bicycle helmets.

AN ADEQUATE, BROAD-BASED FUNDING SOURCE MUST BE DEDICATED TO ENSURING UNIVERSAL COVERAGE.

• Because the health care access problem demands a societal solution, funding must come from a multitude of sources. Funding should be raised from each of the following sources:

1. Tobacco taxes should be greatly increased to reflect more closely the true health costs attributed to smoking.
2. Alcohol taxes should be increased to reflect more closely the health costs related to chemical dependency and alcohol-related injuries.
3. A payroll tax levied on all employers, with increased tax credits for employers subsidizing health coverage, should be promoted.
4. Income taxes should be used as a source of revenue to fund health care access.
- It is essential that these taxes be dedicated to assuring access to health care for all Minnesotans. MM

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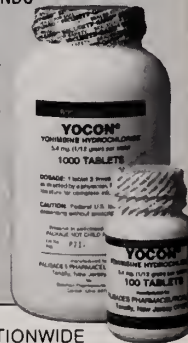
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References:

1. A. Morales et al., New England Journal of Medicine: 1221, November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

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Examples:

1. Benson RC Jr. Laser photodynamic therapy for bladder cancer. *Mayo Clinic Proc* 1986;61:859-64.
2. Guttormson NL, Bubrick MP. Mortality from ischemic colitis. *Dis Colon & Rectum*, to be published.
3. Chatterjee SN. Use of GOR-TEX grafts as vascular access procedure for chronic hemodialysis. Abstract of a paper submitted to the European Society for Artificial Organs Eighth Annual Meeting, Copenhagen, August, 1981.
4. Thompson NW. Thyroid and parathyroid. In: Welch KJ, Randolph JG, Ravitch MM, et al., eds. *Pediatric Surgery*, 4th ed. Chicago: Year Book Medical, 1986: vol 1, 522-33.

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Complications and Mortality of the In-Situ Saphenous Vein Bypass for Lower Extremity Ischemia

David S. Beebe, M.D., Kumar G. Belani, M.B.B.S., M.S.,
 Ji-Chia Lao, M.D., Ph.D., and David Knighton, M.D.

ABSTRACT

We retrospectively reviewed the records of 88 patients who underwent a total of 95 in-situ bypass operations. Seventy-eight percent were diabetics, 56% hypertensives, 23% had a history of a myocardial infarction, 18% a previous stroke or transient ischemic attack, and 19% a renal transplant. Eighty-eight percent had general anesthesia. Eighty-four percent of the operations extended distal to the popliteal trifurcation, with an average operating time of 5.12 ± 1.25 hours and blood loss of 354 ± 239 ml. The overall mortality was 4.2%, with two deaths due to wound sepsis and two deaths due to congestive heart failure. The perioperative myocardial infarction rate was 6.3%. The average age of the patients who died was significantly greater than the age of those who survived (78.2 ± 17.7 years vs. 59.9 ± 14.8 years, $p < 0.05$). The Goldman risk index was not helpful in predicting cardiac complications. The results show that patients undergoing in-situ bypass operations are at high risk for cardiovascular complications. Aggressive perioperative evaluation and management similar to that shown to reduce such complications in abdominal aortic aneurysm surgery should be helpful.

In-situ saphenous bypass for arterial reconstruction of the lower extremity is a common operation in many medical centers. Because this technique offers improved graft patency, much smaller vessels in the lower extremity may be bypassed than was previously possible, thus offering a limb-salvage operation to diabetics and others with severe small-artery disease who would otherwise require amputation.¹

The risk involved in major aortic reconstructive surgery has traditionally been high,² and extensive preoperative cardiovascular evaluation,^{3,4} as well as intraoperative invasive monitoring, is the norm of practice.⁵ Surgeons have typically considered infra-inguinal bypass a lower-risk procedure because it is not intra-abdominal and has no major blood loss. However, since the advent of the in-situ bypass, the preoperative condition of patients presenting for infra-inguinal bypass has become much more severe. We undertook this retrospective study to quantify these patients' preoperative conditions, determine the type and incidence of their perioperative complications, and recommend appropriate anesthetic and perioperative management.

Methods

We retrospectively reviewed the charts and anesthetic records of 88 patients who in total received 95 in-situ bypass operations between 1985 and 1986. We noted preoperative conditions and quantified perioperative cardiac risk using the method of Goldman and Associates, which calculates a number based on preoperative data correlated with the risk of perioperative cardiovascular complications.⁶ We then classified the patients according to four risk groups:

class I, zero to five points, low risk; class II, six to 12 points; class III, 13 to 25 points; and class IV, greater than 25 points, high risk.

We noted indications for operation and the levels of distal anastomosis, and we reviewed the anesthetic techniques and monitoring. By protocol, all patients undergoing in-situ bypass were admitted immediately following operation to the surgical intensive care unit, where 12 lead electrocardiograms and three sets of cardiac enzymes, each eight hours apart, were obtained. If there were indications of a new myocardial infarction, a cardiology consult was obtained. Renal failure was defined as a rise in serum creatinine of 0.5 mg/dl per day. For suspected strokes, a computerized tomography scan was obtained.

We summarized the data as mean $\pm$ standard deviation (SD) or as a percentage, and used Student's t-test or chi-square analysis to determine significance, which was defined as $p < 0.05$.

Results

Eighty-eight patients, 58 male and 30 female, had 95 in-situ bypasses. The mean age was 60.8 ± 15.0 years (range, 28 to 91). Table 1 lists their pre-existing diseases. The average Goldman risk index was 4.74 ± 6.12 , (range, 0 to 26). Seventy-four percent were Goldman class I, 12.5% were class II, 12.5% class III, and 1% class IV.

Non-healing ulcers were the chief indication for this operation (Table 2). Eighty-four percent of the grafts extended distal to the popliteal trifurcation. Only seven (7.4%) operations were reoperations and one (1.1%) was due to a failed angioplasty. The operating time was 5.12 ± 1.25 hours, with an average blood loss of

Table 1

Preoperative conditions (cardiac)

	Number	Percent
History of MI	20	23
Angina or CHF	9	10
Rhythm other than sinus	11	12.5
Total cardiac conditions	35	40

Preoperative conditions (other)

	Number	Percent
Hypertension	49	56
Dialysis	4	4.5
Chronic renal insuff.*	8	9.1
Kidney transplant	17	19
Diabetes	69	78
Stroke/TIA	16	18
Smoking, 20 pack/yr	34	39

*(Cr. > 3.0 mg/dl, includes dialysis)

MI = myocardial infarction

CHF = congestive heart failure

Cr = serum creatinine

TIA = transient ischemic attack

354±239 ml. Twenty-six patients were transfused an average of 483±244 ml of packed red blood cells.

Nine patients had spinal anesthesia and two had epidural anesthesia. However, four of the 11 patients who had regional anesthesia for the operation eventually required general anesthesia. The majority (88%) had general anesthesia.

Forty-two percent of the patients had pulmonary artery catheters placed prior to administration of anesthesia, 13% had pulmonary artery catheters placed after induction, and 14% had only a central venous catheter placed after induction. Seventy-six percent of patients had an arterial line placed before administration of anesthesia. Twenty-two percent had no invasive monitoring for the procedure. Only 27% of the patients who received regional anesthesia had a pulmonary artery catheter placed. However, one was placed emergently two hours into the procedure to aid in hemodynamic management.

The overall 30-day mortality for this operation was 4.2% (Table 3). Two patients died of complications of wound sepsis one to two weeks postoperatively, and two others died

Table 2

Indications for operations

	Number	Percent
Gangrene	2	2.1
Rest pain	11	11.6
Severe claudication	9	9.5
Ulcers	70*	7.37
Unknown or others	3	3.1

*Four patients had severe claudication as well as ulcers.

from complications of congestive heart failure. The mean age was significantly higher for the patients who died than for those who survived the operation (78.2±17.7 years vs. 59.9±14.8 years, $p<0.05$). However, both cardiac deaths occurred in only Goldman class I and II patients.

The mean age of patients who sustained major cardiac complications or mortality (Table 3) was higher than those who did not (73.2±11.2 years vs. 60.0±1.46 years, $p<0.05$), but the Goldman risk index was not significantly different (5.7±5.1 vs. 4.6±6.2, $p>0.05$). Five patients who sustained major cardiac complications were Goldman class I.

Six patients sustained enzyme-proven perioperative myocardial infarctions for a rate of 6.3%. Only one of the six patients had a previous MI, although three had known cardiac disease. Two of the six MIs were transmural, and four were subendocardial. One patient who sustained an MI (subendocardial) died postoperatively of congestive heart failure.

The mean age of the patients who had enzyme-proven perioperative MIs was higher than the mean age of those who did not infarct (71.5±11.7 years vs. 60.3±14.7 years, $0.05<p<0.10$), but did not reach statistical significance. Again, the mean Goldman risk index was not significantly different between those who infarcted and those who did not.

Other complications included flu-

id overload requiring diuresis (8.4%), wound infection (2.1%), pulmonary atelectasis (3.2%), cardiac arrhythmias (2.1%), cerebral vascular accidents (2.1%), and worsening renal insufficiency (4.2%).

Patients with renal transplants constituted a large (19%) and potentially high-risk group of patients in this study. All of these patients were diabetic, with a younger average age (44.5±9.9 years vs. 63.4±15.3 years, $p<0.05$) and lower mean Goldman risk index (2.2±3.9 vs. 5.3±6.3, $p<0.05$) than the other patients. One subendocardial MI was the only major morbidity in this group of patients, and there were no deaths.

Discussion

The in-situ saphenous vein bypass is a limb-salvage operation for patients with small-artery atherosclerosis. Almost 80% of the patients in this series were diabetic, and 40% had some previous cardiac disease. Seventy percent of the operations were for tissue loss, a much higher percentage than that reported for other series of infra-inguinal bypasses.⁷ The surgery resulted in minimal blood loss but involved a long operating time (5.12±1.25 hours; range, 4 to 6 hours), particularly compared with series using synthetic grafts (approximately 2.5 hours).⁸ The mortality for this procedure was 4.2%, comparable to reported rates of 0% to 6% in series of synthetic or reversed saphenous vein reconstruction.^{7,8}

There was, however, a high rate of cardiovascular complications, particularly in the older age group. Six patients (6.3%) developed a perioperative myocardial infarction. Two cardiac deaths occurred, both associated with congestive heart failure. The rate of myocardial infarctions or life-threatening cardiac complications was as high as reported for patients undergoing abdominal aortic aneurysm repair.² Similar to other studies on cardiovascular morbidity and mortality after vascular reconstruction, the Goldman risk index was not helpful in predicting cardiac complications.⁹

Preoperative angiographic studies on patients undergoing vascular reconstruction show a 30% incidence

Table 3

*Mortality and cardiovascular morbidity***Mortality**

Age	Goldman index	Anesthesia	Monitoring	Time and cause of death post-op
52	14	SAB	PA, art.	14 days, sepsis, renal failure
86	19	GEN	PA, art.	10 days, sepsis, MI after septic episode
84	8	GEN	CVP, art.	7 days, CHF
91	5	SAB/GEN	PA, art. placed 4 hours into case	7 days, CHF

Cardiovascular morbidity

Age	Goldman index	Anesthesia	Monitoring	Type
71	16	GEN	Art.	Subendocardial MI, CHF
58	0	GEN	PA, art.	Inferior MI
76	5	GEN	PA, art.	Subendocardial MI
67	3	GEN	PA, art.	Anterior MI, CHF
66	3	GEN	None	Subendocardial MI

SAB=spinal anesthetic; GEN=general anesthetic; SAB/GEN=spinal anesthetic followed by general anesthesia; PA=pulmonary artery catheter; art.=arterial line; CVP=central venous catheter; CHF=congestive heart failure; MI=myocardial infarction.

of severe coronary artery disease, with a higher incidence in diabetics and in patients more than 70 years of age.¹⁰ In addition, the small-artery atherosclerotic disease of many patients presenting for in-situ bypass operations may increase the incidence of severe coronary disease. Many patients may also have diabetic or uremic cardiomyopathy impairing cardiac performance^{11,12} and increasing the risk for congestive heart failure.

Reul et al. showed that significant reduction in the risk of cardiovascular complications occurs in vascular surgery patients who have had a previous coronary bypass operation.¹³ Other authors have described preoperative screening for coronary artery disease by coronary angiography, graded exercise testing, and, most recently, thalliumdipyridamole

scanning.^{3,4,10} Coronary artery bypass or angioplasty may be indicated in patients demonstrating severe coronary artery disease before undergoing the in-situ bypass.

Yeager et al. report a reduction in cardiovascular morbidity and mortality when epidural anesthesia is used primarily or as a component of anesthetic management.¹⁴ However, the length of surgery makes regional anesthesia alone impractical for many patients. The use of anticoagulants intraoperatively, which may increase the risk of an epidural hematoma from a spinal or epidural anesthetic, may also favor the use of general anesthesia.¹⁵

More extensive hemodynamic evaluation and monitoring may help reduce the rate of cardiovascular complications. Rao et al. found that the incidence of perioperative myocardi-

al infarction in patients with a previous myocardial infarction, a known high-risk group, can be reduced by 1) monitoring perioperative pulmonary artery pressures and cardiac outputs, 2) attempting to maintain pulse and arterial and pulmonary arterial pressures within 20% of pre-induction values intraoperatively, 3) keeping the patient in intensive care postoperatively for at least 24 hours.¹⁶

Operative mortality has been reduced in aortic aneurysm surgery by preoperative pulmonary artery catheterization and determination of the ventricular response to volume loading.⁵ Determination of the optimum central venous pressure, pulmonary capillary wedge pressure, and pulmonary artery pressures for cardiac performance is made. Currently, a similar treatment protocol (figure) is being used with University of Minne-

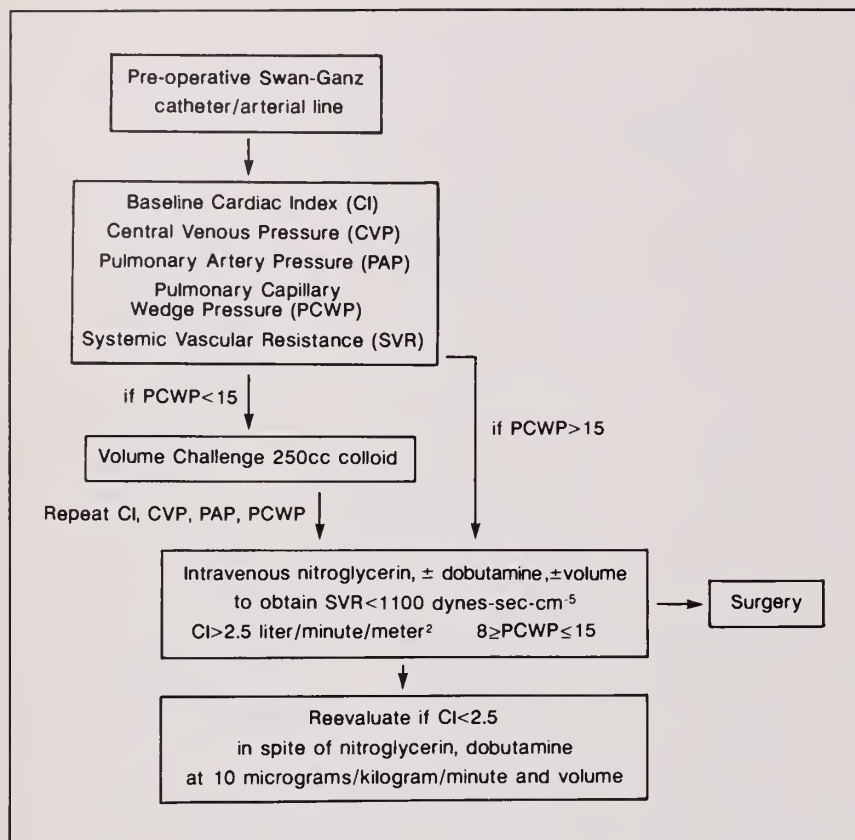


FIGURE - Current evaluation and treatment plan for patients undergoing in-situ saphenous vein bypass operations at the University of Minnesota.

sota patients undergoing in-situ bypass surgery.

Summary

In summary, patients undergoing in-situ saphenous vein bypass surgery are at high risk for cardiovascular complications due to their extensive vascular disease. Older patients, in particular, seem prone to mortality and cardiovascular complications. The results suggest that patients undergoing an in-situ bypass should receive the same thorough perioperative evaluation and management as patients undergoing abdominal aneurysm surgery, where aggressive perioperative evaluation, monitoring, and anesthetic management have significantly reduced cardiovascular morbidity and mortality.^{3,5} **MM**

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REFERENCES

1. Leather RP, Shah DM, Karmody AM. Infrapopliteal arterial bypass for limb salvage: increased patency and utilization of the saphenous vein used in situ. *Surgery* 1981;90:1000-8.
2. Diehl JT, Cali RF, Hertzner NR, Beven EG. Complications of abdominal aortic reconstruction: an analysis of perioperative risk factors in 557 patients. *Ann Surg* 1983;197:49-56.
3. Cutler BS, Leppo JA. Dipyridamole thallium 201 scintigraphy to detect coronary artery disease before abdominal aortic surgery. *Vasc Surg* 1987;5:91-100.
4. McPhail M, Calvin JE, Shariatmadar A, Barber GG, Scobie TK. The use of preoperative exercise testing to predict cardiac complications after arterial reconstruction. *Vasc Surg* 1988;7:60-8.
5. Whittemore AD, Clowes AW, Hechtman HB, Mannick JA. Aortic aneurysm repair: reduced operative mortality associated with maintenance of optimum cardiac performance. *Surgery* 1980;192:414-21.
6. Goldman L, Caldera DL, Nussbaum SR, et al. Multifactorial index of cardiac risk in noncardiac surgical procedures. *N Engl J Med* 1987;297:845-50.

7. Veith FJ, Gupta SK, Ascer E, et al. Six-year perspective multicenter randomized comparison of autologous saphenous vein and expanded polytetrafluoroethylene grafts in infrainguinal arterial reconstructions. *Vasc Surg* 1986;3:104-14.
8. Quinones-Baldrich WJ, Martin-Paredero V, Baker JD, Busuttill RW, Machleder HI, Moore WS. Polytetrafluoroethylene grafts as the first choice substitute in femoropopliteal revascularization. *Arch Surg* 1984;119:1238-43.
9. Calvin JE, Kieser TM, Walley VM, McPhail NV, Barber GG, Scobie TK. Cardiac mortality and morbidity after vascular surgery. *Can J Surg* 1986;29:93-7.
10. Hertzner NR, Beven EG, Young JR, et al. Coronary artery disease in peripheral vascular patients: a classification of 1000 coronary angiograms and results of surgical management. *Ann Surg* 1984;199:223-33.
11. Sanderson JE, Brown DJ, Rivellesse A, Kohner E. Diabetic cardiomyopathy? An echocardiographic study of young diabetics. *Br Med J* 1987;1:404-7.
12. Hung J, Harris PJ, Uren RJ, Tiller DJ, Kelly DT. Uremic cardiomyopathy: effect of hemodialysis on left ventricular function in endstage renal failure. *N Engl J Med* 1980;301:547-51.
13. Reul GJ, Cooley DA, Duncan JM, et al. The effect of coronary bypass on the outcome of peripheral vascular operations in 1093 patients. *Vasc Surg* 1986;3:788-98.
14. Yeager MP, Glass DD, Neff RD, Brinck-Johnsen T. Epidural anesthesia and analgesia in high-risk surgical patients. *Anesthesiology* 1987;66:729-36.
15. Varkey GP, Brindle GF. Peridural anaesthesia and anti-coagulant therapy. *Can Anaesth Soc J* 1974;21:106-9.
16. Rao TLK, Jacobs KH, El-Etr AA. Reinfarction following anesthesia in patient with myocardial infarction. *Anesthesiology* 1983;59:499-505.

Physician Malpractice and Managed Care Plans

James B. Platt, J.D.

Health care costs in the United States have increased at a tremendous rate during the past decade. In 1990, we spent more than \$600 billion on health care—an estimated 12.2 percent of the gross national product. To contain these runaway costs, many traditional indemnity plans have been replaced by HMOs, PPOs, and other managed care health plans.

Managed care plans employ a variety of methods to lower costs. These methods include:

- Reviewing utilization in order to approve treatment plans prospectively (i.e., precertification requirements), concurrently (i.e., the length of a hospital stay), and retrospectively;
- Identifying quality and cost-efficient providers and rewarding providers who meet the prescribed standards;
- Monitoring quality and effective treatment;
- Designing benefit plans that reduce the costs of care; and
- Encouraging and educating patients regarding the costs of care.

Many physicians believe that cost containment can interfere with the traditional physician-patient relationship. Because cost-control efforts may influence the medical care provided, they raise the potential for liability for the physician as well as the managed care organization.

If, for example, payment is denied for a course of treatment, may the physician abandon that treatment plan? If there is doubt that the patient and/or the HMO will pay for the treatment, is the physician still obligated to provide it? If the managed care plan denies payment, should the physician further pursue the issue on the patient's behalf?

Many physicians are asking these questions in Minnesota, where

managed care plans are becoming increasingly common. At the September 1991 meeting of the Minnesota Medical Association's House of Delegates, physicians raised questions about the liability of third-party pay-

“Cost-control efforts raise the potential for liability for the physician as well as the managed care organization.”

ers who restrict treatment choices. The issue was referred to the MMA Board of Trustees for further study and review.

Traditional Theories of Physician Malpractice

In order to understand the tension between cost containment and the physician's duty to the patient, it is important to review the traditional theories of physician malpractice.

Physicians must discharge their duties with reasonable care. To do otherwise constitutes negligence. “Reasonable care” requires that the doctor use the degree of skill and learning that is normally possessed by other members of the profession practicing in similar communities and under similar circumstances. In most states, the courts have applied this standard in several ways:

- A doctor is generally not negligent simply because his or her efforts prove unsuccessful or because the doctor chooses between accepted

methods of treatment.

- If a doctor knows or should know that his or her expertise is not sufficient to treat the patient, the doctor has a duty to refer the patient to a specialist.

- A doctor may not discharge a patient from the hospital if doing so is not consistent with the exercise of reasonable care.

A physician has a duty to inform patients of treatment risks and obtain consent before proceeding. The Minnesota Supreme Court has held that a doctor may be liable for “negligent nondisclosure risk attendant to proposed or alternative methods of treatment.”¹ The physician should, therefore, inform the patient of the significant risks of any proposed treatment or alternatives.

A physician may not abandon a course of treatment once it has begun. Courts have recognized that a physician may not discontinue needed emergency care on the grounds that previous services have not been paid for. The existence of financial incentives to limit care or other cost-control mechanisms have generally not been recognized as a defense.

Managed Care Plan Liability: Recent Cases

Perhaps the most important case to date involving liability under a managed care plan was a California decision, *Wickline v. State*.² The circumstances were as follows: Lois Wickline was hospitalized for major surgery involving poor circulation in her legs. She suffered complications after surgery and required still more surgery. Her treating physician filled out a medical form with Medi-Cal, California's Medicaid program, requesting an eight-day extension to her scheduled hospital discharge date.

After talking to a Medi-Cal physician adviser, the Medi-Cal on-site nurse reviewer approved an extension of only four days. Lois Wickline was discharged after the four-day extension but had to be readmitted nine days later with severe pain and discoloration in her leg. Eventually, her leg was amputated above the knee. She brought suit against Medi-Cal, alleging that the payer had been negligent in failing to approve the full eight-day extension. The court eventually held that Medi-Cal could not be held liable for negligence in this case because the actual decision was made by Lois Wickline's physicians, not the payer. Medi-Cal was not a party to that medical decision and could not, the court stated, be held liable if the decision was negligent.

This case is significant not only for managed care plans, which, the court said, could be held liable for "defects" in their managed care mechanisms that result in the denial of medically necessary services, but also for physicians who abide by HMOs' decisions. Specifically, the court noted the following:

- The physician has a duty to care for the patient whether or not the course of treatment will be paid for by the HMO. By refusing to find liability for Medi-Cal's review decision, the court implicitly criticized the physicians for failing to challenge Medi-Cal's decision.

- The physician has a duty to inform the patient when he or she disagrees with the HMO's decision regarding coverage of a treatment plan.

Although Lois Wickline chose not to sue her physician and the hospital, the court's commentary regarding the physician's duty is one of the first instances where a court indicated how the traditional theories of liability may apply to a physician treating a patient under a managed care plan.

In the 1990 case of *Wilson v. Blue Cross of Southern California*,³ the managed care plan refused to pay for Howard Wilson Jr.'s hospitalization after the 10th day of inpatient treatment. His treating physician had recommended three to four weeks of inpatient care for depression, drug

dependency, and anorexia. Following his discharge, Howard Wilson Jr. committed suicide. His parents then sued Blue Cross and the treating physician, alleging that the refusal to authorize additional days was a substantial factor in his suicide.

In this case, the court held that the managed care plan could be held liable because the insurance contract terms stated that inpatient benefits would be covered, up to a maximum of 30 days, as long as the treating physician deemed the care necessary. Therefore, the plaintiffs contended, the insurer had no right under the contract to submit the physician's

"The best means for
physicians to
minimize liability is
to continue
practicing good
medicine."

decision to an outside utilization review company.

In *Bush v. Dake*,⁴ the plaintiff, an HMO enrollee, alleged that her managed care plan was negligent because it provided financial incentives that led to her injury. After several months of treatment by her physician for vaginal bleeding, the plaintiff was referred to a specialist. The specialist performed some tests and advised the patient to return if the symptoms persisted. The symptoms did persist, but the primary care physician refused to authorize a second referral to the specialist. Neither physician performed a Papanicolaou smear. Three months later, the plaintiff was hospitalized with cervical cancer. She claimed in her suit that only the primary care physician could perform Papanicolaou smears under the HMO's compensation system, and he did not receive any extra compensation for performing the procedures. That compensation system, she alleged, provided disincentives for physicians to treat, refer, and diagnose patients, which con-

tributed to her improper care.

Although this case was dismissed without a court opinion, it stands as one of the first cases reported where a patient took the position that financial cost incentives can lead to negligence.

Reducing Physician Liability Under Managed Care Plans

Based on these cases, some general guidelines may help physicians minimize their potential for liability when treating patients covered through managed care plans.

- Continue providing good medical care. Undoubtedly, the best overall means for physicians to minimize liability is to continue practicing good medicine. Physicians should not permit their treatment decisions to be based on financial incentives.

- Fully explain risks and alternatives. Physicians should explain fully to patients the recommended course of treatment. If, for example, a patient's managed care plan will not pay for additional hospital days, and the physician believes the early discharge creates a risk, he or she should explain that to the patient.

- Document recommendations and decisions. Physicians should document in a patient's medical record the course of treatment recommended and the patient's decision.

- Go to bat for the patient. Physicians may need to act on behalf of the patient by questioning the managed care plan's decisions. The *Wickline* decision suggests that if a treating physician disagrees with the treatment plan, he or she should investigate. Was the review decision made by qualified medical professionals? Was a denial for surgery or extended hospitalization reviewed by a licensed physician? Was a specialist involved?

- Act as the patient's advocate. Some commentators have suggested that physicians may need to help patients take advantage of any rights of appeal to an HMO's decision, particularly in situations where the patient may be physically or mentally unable to do so or may not have the necessary resources or information to do so.

- Be aware of HMO contract lan-

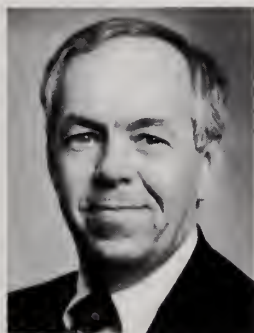
guage. Physicians should carefully review their agreements with HMOs and PPOs for language that makes the physicians solely responsible for treatment decisions. Are the referral limitations acceptable? Will the spe-

cialists provide good care to the patient? How is "medical necessity" determined? Physicians should also be cognizant of the liability sections of the contract. Often, these sections require the physician to reimburse

the plan for any losses it may incur in a lawsuit, including its attorney fees, that arise out of the physician's services. Since most malpractice insurers will add a rider to cover indemnification clauses in HMO contracts, the practical course of action is to provide a copy of the contract to the insurer and ask that coverage be put in place.

Although there have been few reported cases so far, the pressure to control health care costs is likely to increase, generating more cases in the future. Physicians should carefully review the language in the HMO contract before signing and should be familiar with how the HMO controls costs and referral practices. **MM**

James Platt is an officer and shareholder of Fredrikson & Byron and a member of its Compensation Planning and Health Law departments.



K. James Ehlen, M.D.
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MANAGED CARE ENHANCES PHYSICIAN MANAGEMENT OF CARE

Last month I talked about the importance of physician participation in the public health care reform debate and how managed care frames an appropriate response to that challenge.

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- Evaluation of experimental/investigational status for procedures

The Council's four advisory committees—family practice, internal medicine, pediatrics and obstetrics/gynecology—offer broad review of issues within those specialties. Its 26 specialty subcommittees also address an array of complex issues requiring medical policy positions.

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REFERENCES

1. *Cornfeldt v. Tongen*, 262 N.W.2d 684, 699 (Minn. 1977).
2. *Wickline v. State*, 192 Cal. App.3d 1630, 239 Cal. Rptr. 810, (1986), *cert. granted*, 727 P.2d 753, 231 Cal. Rptr. 560 (1986), *rev. dismissed and remanded*, 741 P.2d 613, 239 Cal. Rptr. 805 (1987).
3. *Wilson v. Blue Cross of Southern California*, 222 Cal. App.3d 660, 271 Cal. Rptr. 876 (1990).
4. *Bush v. Dake*, No. 86-25767-NM (Mich. Cir. Ct., Apr. 27, 1989).



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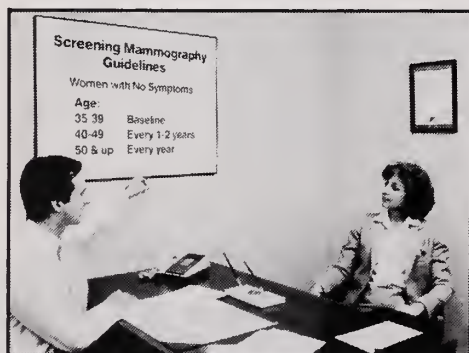
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Flexible-Benefit Plans Offer Savings for Employees, Employers

Hilary O'Donnell and Walter Jones

As health care costs continue to skyrocket at an average pace of nearly 20 percent a year, a growing number of companies are limiting medical benefits while increasing the financial contributions that employees must pay toward their health care plans. Many companies are now incorporating a flexible-benefit plan, often called a "cafeteria plan," into their insurance programs to help confront this fiscal dilemma. These plans offer an opportunity for both the employees and the employer to achieve substantial tax savings.

Flexible-benefit plans are authorized under Section 125 of the Internal Revenue code. Employees have the option of directing a portion of their gross salary dollars into a special account and then withdrawing those pretax dollars to pay for "qualifying" expenses. (See table for a list.) This accounting procedure reduces the employee's taxable income, resulting in more take-home pay. For the employer, the lower base payroll results in a reduction in the matching FICA taxes the company must pay.

Three types of flexible-benefit accounts allow for pretax savings in the make-up of a flexible-benefit plan. The first is often referred to as a premium conversion account. This account gives the employee the option of paying qualified group health premiums with pretax dollars. Qualified insurance premiums include premiums paid for health care; dental, disability and accident, and cancer insurance; and premiums for group-term life insurance of up to \$50,000. For example, an employee in a 31 percent tax bracket and contributing \$100 per month for the basic health plan would save an average of \$372 annually if the monthly premium was paid with pretax dollars.

The second type of pretax savings account in a flexible-benefit plan allows employees to be reimbursed for eligible medical expenses that are not covered by insurance plans. This type of account is referred to as a

"Flexible-benefit plans offer an opportunity for both the employees and the employer to achieve substantial tax savings."

medical-expense spending account. Eligible expenses range from vision care to wheelchairs and include costs associated with chiropractor visits, prescription drugs, and mental health treatments. These pretax dollars can also be used for paying plan deductibles or copayments.

The last type of pretax savings account in a flexible-benefit plan allows employees to be reimbursed for dependent adult and/or child care expenses. This type of account is commonly referred to as a dependent-care spending account. An eligible dependent is a child under 13 years old who qualifies as a dependent for federal income tax purposes. Elderly parents can also qualify as eligible dependents if they are incapable of caring for themselves and qualify as dependents for tax purposes. Dependent-care claims cannot exceed the lesser of either \$5,000 for one or more children, the employee's total yearly salary, or the

yearly salary of the employee's spouse. With today's working families, this option is one avenue that parents can take to counteract rising child-care costs. Under most circumstances, it is more advantageous for the employee to pay for dependent care with pretax dollars than to take the credit available on his or her individual tax return.

It is important to note that the Internal Revenue Service has enacted a few rules with regard to the flexible-benefit program that all participants should understand. The first rule is the "use it or lose it" provision; participants must forfeit whatever money is left in the account after all eligible expenses have been reimbursed at the end of the plan year. Therefore, it is very important to calculate carefully the money going into each flexible-benefit account so that the amount will equal the year's expenses. The second rule requires the employer or association to be liable for what the employee directs to the medical-expense spending account. This means that the employer or association must make available to the employee, at any time during the year, the full amount that the employee has directed to an account by the end of the year. Also, if an employee leaves the company and has been reimbursed more money than is actually in the account, the employer or association is responsible for the difference. The last rule is that money allocated for one account cannot be used for another account. These rules have been enacted to ensure appropriate use of the plan and to establish consistency in the flexible-benefit program among various employers.

To illustrate the tax savings possible in a flexible-benefit plan, let's identify how a typical family with

Table

Eligible Section 125 Spending

Account expenses
 Acupuncture
 Alcoholism treatment
 Ambulance hire
 Artificial limbs and teeth
 Birth-control pills
 Braces
 Braille books and magazines
 Car controls for children with handicaps
 Child care
 Chiropractors
 Christian Science practitioner fees
 Co-insurance
 Contact lenses
 Crutches
 Day care for dependents necessary for employment
 Deductible medical coverage
 Dentures
 Dentists
 Diagnostic fees
 Drug and medical supplies
 Drug addiction treatment
 Electrolysis
 Eyeglasses, including exam
 Hair transplants
 Healing services
 Health insurance (including same Medicare)
 Hearing aids and batteries
 Home improvements based on medical necessity
 Hospital bills
 Hospitalization insurance
 Hypnosis for treatment of an illness
 Insulin
 Lab fees
 Laetrile by prescription
 Life fee to retirement home for medical care
 Medical information plan
 Membership fees in association furnishing medical, hospitalization, and clinical care
 Nurses (including board and social security taxes paid by patient)
 Obstetric care
 Orthopedic shoes
 Oxygen
 Physicals and other diagnostic care
 Physicians
 Practical nurses
 Psychiatric care
 Seeing-eye dog and its upkeep
 Smoking-cessation program if prescribed
 Special education for the blind and physically or mentally disabled people
 Sterilization
 Surgery and related treatment
 Telephone and television audio display for the deaf
 Transportation related to medical treatment
 Vitamins by prescription
 Weight-loss program if prescribed for patient
 Wheelchair
 Wigs
 X-rays

young children might participate. The Smith's dual income places them in the 31 percent tax bracket. For 1992, their children will attend a Kinder-Care Learning Center for \$4,000, and the Smiths estimate they will pay \$1,000 in out-of-pocket medical expenses, including plan deductibles. Under the flexible-benefit plan offered by Mrs. Smith's employer, the Smiths can use pretax dollars from the medical-expense and dependent-care spending accounts to pay for these expenses. Because the \$4,000 for dependent care and the \$1,000 for medical expenses are not taxed, the Smiths will save \$1,500. In this example, the company will also realize a savings of approximately \$382 due to the \$5,000 reduction in the base payroll amount for matching FICA taxes.

A flexible-benefit plan will not replace the benefits already existing in a company's insurance program, but it will enhance the program with the opportunity for growth and tax-free savings. There are no restrictions

on the number of participants needed to establish a program. Many smaller employers use third-party administrators to run their programs. In doing so, they reap the benefits of a flexible-benefit program while avoiding the paperwork.

The most important ingredient to any successful flexible-benefit program is participation. The more persons enrolled in a plan, the less cost and liability incurred by the employer or association. Testing is also needed to ensure that highly compensated employees don't receive a disproportionate share of the benefits. To ensure that plans are not discriminatory, rules exist regarding the percent of benefits that can accrue to the highly compensated.

Flexible-benefit plans offer a winning solution to the employee benefit dilemma; however, careful consideration and proper communication are crucial to their success. Employees must fully understand and participate for everyone involved to realize the potential tax savings. **MM**

Hilary O'Donnell is an account executive with Seabury & Smith in Washington, D.C., the MMA's group insurance administrator, specializing in association insurance program management.

Walter Jones is an account executive with Seabury & Smith specializing in Section 125 programs and supplemental employee benefits for associations and corporations.



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On the Business Side

Minnesota Medicine invites you to submit informational articles on such topics as clinic management, personal and practice-oriented financial management, computer applications, taxes, and human resources laws. We prefer practical articles that include information Minnesota physicians can put to immediate use. Submit "On the Business Side" articles to George Lohmer, chief financial officer, Minnesota Medical Association, 2221 University Avenue SE, Suite 400, Minneapolis, MN 55414.

A Renewal of Purpose for 1992

Thomas A. Stolee, M.D.

As we enter a new year, it is time to ask ourselves these questions: What are we all about? What is the purpose of the Minnesota Medical Association?

To answer these questions, I will quote our corporate purpose from the MMA's Articles of Incorporation, and then I will state my goals, which are part of my effort to fulfill these organizational objectives.

The corporate purpose states: "The (MMA) is organized and shall be operated exclusively to support and improve the science and art of medicine, and to advance community welfare, community health, and scientific education...and in furtherance of such purposes the (MMA) may:

1. Elevate the standards of medical education and knowledge at both the undergraduate and the graduate levels;

2. Foster the presentation of papers, articles, findings, and studies by its component medical societies in the fields of medical research, diagnosis, therapy, operative procedure, prevention of disease, and promotion of the public health;

3. Promote high standards of medical and health service in all public programs established for the welfare of the people of Minnesota;

4. Bring into one federation all medical professionals in the state of Minnesota and unite with similar societies in other states to form the American Medical Association;

5. Assist officials and agencies of the state of Minnesota with advice and service in the administration of its medical, hospital, welfare, and public health programs, and promote through its component medical societies continuous advice and assistance in county welfare and public health programs; and



"We must continue striving to satisfy our objectives."

6. Engage in any lawful programs or activities that are supportive of physicians' professional growth and development, that promote the science and art of medicine, or that promote community welfare, community health, and scientific education."

There you have it. With these objectives in mind, I have set goals for my presidency. Although the paths are sometimes convoluted and the light occasionally dim, we will persist. My goals are to:

- Bring about ready access to health care for all Minnesotans, regardless of where they live or what their economic circumstance may be;

- Decrease the cost of health care through wiser use of resources, greater patient and physician accountability for costs, greater support of preventive medicine and primary care, simplification of administrative red tape, as well as insurance reform, malpractice reform, and professional control of technology use;

- Increase the availability of medical care in rural and inner-city areas through more equitable reimbursement, enhanced physician incentives, greater public awareness; and greater emphasis on primary care and

rural practice in medical schools and residency programs;

- Increase the social and medical wellness of our minority citizens through fairness in educational, health care, and employment opportunities;

- Continue to strive for equitable Medicare reimbursement nationally so that our patients do not continue to subsidize those in other areas of the country;

- Continue to strive for adequate Medicaid reimbursement so that doctors taking care of the poor do not continue to suffer economic discrimination;

- Continue the crusade against tobacco use as a major public health problem;

- Create a high level of public awareness of the problems created by addiction to alcohol, drugs, and gambling;

- Educate the public about sexually transmitted diseases, including AIDS and cervical carcinoma. Only through public education can we hope to control these menaces;

- Bring about more reasonable mental health legislation to decrease homelessness, increase community mental health treatment capabilities, and focus attention on people with serious and persistent mental illness;

- Develop a fair peer-review advocacy system for Minnesota physicians;

Obviously, we will not reach these goals in one year, but we must continue striving to satisfy our professional and organizational objectives. We have high ideals and high aspirations for humanity. That's why we call ourselves physicians.

Please join me in renewing our collective resolutions for 1992. My family and I wish you and your loved ones a happy New Year.

MM



"Being a patient advocate is what being a physician is all about."

Dr. Kevin Fullin, Cardiologist, Kenosha, Wisconsin, Member, American Medical Association

Why would a cardiologist get involved in the issue of family violence? Perhaps, because what he saw simply cried out for action.

"Fully a third of all women's injuries coming into our emergency rooms are no accident," says Dr. Fullin.

While others were content to downplay the issue of family violence, Dr. Fullin would not. He petitioned state officials, and through his efforts the first Domestic Violence Advocate Program in his state was created.

"Organized medicine must serve as an advocate for patients," stressed Dr. Fullin.

The American Medical Association (AMA) couldn't

agree more. We're committed to focusing physician attention on the issue of family violence.

You are invited to join Dr. Fullin and to join with him in his efforts to bring quality health care to those in need. Become a member of the American Medical Association today.

Members of the AMA are encouraged to join their state, county and specialty societies.

American Medical Association

Physicians dedicated to the health of America



Ethics by the Bedside

By Charles M. Culver, M.D., Ph.D., Ed., University Press of New England, 1990

Reviewed by Spencer Reece

*Because I could not stop for Death—
He kindly stopped for me—
The Carriage held but just Ourselves—
And Immortality.*

—Emily Dickinson

"Ethics by the Bedside" is a collection of 12 essays by physicians about moral dilemmas concerning death in modern American hospitals. Death was fairly simple in the past. A person would get ill, descend into a hospital bed or bed at home, and expire when the time was right. That was it. But we've now taken mortality into our own hands. A person can die in a few weeks, months, or years, depending on when the ventilator and feeding tubes are removed. A very natural process has become unnatural. The days of Death dropping in on Emily Dickinson are not as reliable as they once were. Death might come. But nowadays, Death might also hang around for a while like a tiresome guest.

I found Dr. Culver's book provoking for its multifarious viewpoints. Each essay tells a different story about death. Culver, a professor of psychiatry and adjunct professor of philosophy at Dartmouth College, opens the book with a reprint of a letter he wrote to ethicists when he began requesting material for the book: "I want you to tell a story, to emphasize the personal experience you had, and extensive use of citations might tend to detract from the sense of immediacy I hope will come through." The book holds true to Culver's intent, offering tragic, difficult, and engaging narratives with few citations.

As more machinery crowds the stage of life, ethics committees are becoming commonplace in hospitals around the country. They are often made up of ministers, psychiatrists, Ph.D.s, and M.D.s. Where earlier there was a doctor and a patient, there now is a whole jury to carefully weigh issues. Ethics consultations are relatively new to the world of medicine, and, thus, Culver's collection of testimonies is somewhat a maverick.

In one essay, "A Philosophical Consultation" by Bernard Gert, a family must decide when to withdraw food and fluids from its permanently unconscious and terminally ill father. Listening to the family, Gert, a philosophy professor at Dartmouth College, writes: "It became quite clear to them that I was in no hurry, that I was prepared to listen to them and talk to them for as long as was necessary to resolve the problem. This has a very beneficial effect. One of their main complaints was that no one had been willing to sit down

and talk over the situation with them."

With guidance from the hospital's ethics committee, the family members chose to remove the feeding tubes and let their father die. Ironically, despite all the available high-tech instruments, the cure for this family was talking and holding hands.

The stories range from families dealing with loved ones coming to the end of their lives, to loved ones who have just entered the world. Premature babies born with multiple birth defects and with severe brain retardation—who not long ago would have died quietly and naturally in a matter of seconds—can now be kept alive for months and years. According to Alan Fleischman, director of neonatology and professor of pediatrics at Albert Einstein College of Medicine, "American perinatology has moved in the past decade to resuscitate virtually all potentially viable infants, looking to contemplative ethical analysis only when there is greater certainty as to outcome after assessment of the patient's potential in the nursery."

A mother in one of the stories questions the validity of keeping her brain-damaged, ventilator-dependent, premature baby alive. She wonders if it isn't barbarism, and some of what occurs does resemble a freak show. For example, in one ghoulish story, a brain-dead infant is kept alive for seven years, the parents hoping against hope. The essayist tells us that after seven years, "Vivian's body had grown into a grotesque, contorted shape. She showed no signs at all of higher mental function, lacking even responsive eye movement. Whenever she was taken off the ventilator, she was entirely unable to breathe on her own." The parents end up visiting the hospital less and less. Only when the hospital forces the parents to take Vivian home and care for her themselves do the parents realize it is time for Vivian to die.

"Ethics by the Bedside" asks us to bring order and dignity to death. The essays in Culver's book stress that Death is not the enemy. Quality of life is more important than its quantity. The people whose stories are told in these essays overwhelmingly want the natural: if the brain is dead, let the body die. The more complicated the exit from this world, the more simple the requests become.

MM

Spencer Reece is the managing editor of the *Reece Report*, a medical newsletter published in Northfield, Minnesota. He has published book reviews in *The Star Tribune* and *The Northfield News*, and is also the recipient of this year's *Loft Mentor Series Prize in Poetry*.

In Memoriam

Maurice J. Barry Jr., M.D.
University of Indiana, 1944
Born: 1919, Died: Nov. 28, 1991



Alex G. Berger, M.D.
University of Minnesota, 1932
Born: 1904, Died: Sept. 4, 1991



Joseph G. Brennan, M.D.
University of Bologna, Italy, 1947
Born: 1916, Died: June 23, 1991



Morris L. Cable, M.D.
University of Minnesota, 1927
Born: 1902, Died: Sept. 22, 1991



Donald C. Campbell, M.D.
University of Nebraska, 1935
Born: 1910, Died: Oct. 30, 1991



Walter Coddon, M.D.
University of Minnesota, 1935
Born: 1911, Died: June 17, 1991



Robert W. Cranston, M.D.
University of Minnesota, 1928
Born: 1903, Died: Nov. 26, 1991



Bernhard J. Cronwell, M.D.
University of Illinois, 1927
Born: 1898, Died: Nov. 20, 1991



Richard M. Duff, M.D.
University of Minnesota, 1966
Born: 1940, Died: Sept. 16, 1991



Adolf F. Dysterheft, M.D.
University of Minnesota, 1930
Born: 1905, Died: Sept. 26, 1991



John J. Galligan, M.D.
University of Minnesota, 1946
Born: 1922, Died: Aug. 12, 1991

Elmer M. Hill, M.D.
University of Minnesota, 1932
Born: 1905, Died: Nov. 14, 1991



Oscar Lipschultz, M.D.
University of Minnesota, 1929
Born: 1904, Died: Nov. 30, 1991



Theodore G. Martens, M.D.
University of Rochester, NY, 1943
Born: 1917, Died: Aug. 12, 1991



Harold Martin, M.D.
Indiana University, 1944
Born: 1919, Died: June 6, 1991



Mary E. Morehouse, M.D.
University of Kansas, 1982
Born: 1955, Died: June 6, 1991



Martin C. Peper, M.D.
Vanderbilt University, 1955
Born: 1930, Died: Sept. 6, 1991



Robert I. Roelofs, M.D.
University of Iowa, 1965
Born: 1939, Died: June 10, 1991



Cornelius A. Saffert, M.D.
University of Minnesota, 1926
Born: 1903, Died: Sept. 30, 1991



Thomas H. Seldon, M.D.
Queens University, Ontario, 1929
Born: 1905, Died: Oct. 22, 1991



Sidney A. Whitson, M.D.
University of Minnesota, 1928
Born: 1902, Died: Aug. 15, 1991



Ferdinand A. Zinter, M.D.
University of Minnesota, 1939
Born: 1907, Died: June 30, 1991

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People and Places Making Medical News

People

ACS Distinguished Service Award

The American Cancer Society honored B.J. Kennedy, M.D., University of Minnesota regents professor of medicine emeritus and masonic professor of oncology emeritus, at its annual meeting in November. Kennedy received a Distinguished Service Award for his 45 years of distinctive and compassionate care of cancer patients and his vision in pioneering the field of oncology.

Kennedy has been an attending physician with the University of Minnesota School of Medicine since 1952 and has published papers in more than 750 scientific publications. He has consulted and edited 15 prominent medical journals, most of which are specific to cancer research and care.

Academy of Ophthalmology Officers

Richard P. Carroll, M.D., of Minneapolis, has been elected president of the Minnesota Academy of Ophthalmology for 1991-92. Other officers elected are Martin B. Kaplan, M.D., Minneapolis, president-elect; Rene W. Pelletier, M.D., St. Paul, treasurer; and Jerry L. Kobrin, M.D., St. Paul, secretary. Raymond C. Croissant, M.D., Edina, continues as chair of the external affairs committee, and Paul T. Wicklund, M.D., St. Paul, was appointed chair of the internal affairs committee.

AGPA Trustee

Audrey M. Nelson, M.D., Rochester, was elected to the board of trustees of the American Group

Practice Association at its 42nd Annual Conference. She is the first woman to hold the position. Nelson is a consultant in internal medicine, rheumatology, and pediatrics at Mayo Clinic, an associate professor in internal medicine at Mayo Medical School, and an MMA delegate to the AMA House of Delegates.

Nursing Home Medical Directors President

Thomas M. Altemeier, M.D., medical director of senior services at HealthEast Bethesda Lutheran Hospital, St. Paul, has been elected to a two-year term as president of the Minnesota Association of Nursing Home Medical Directors.

Before becoming president of the organization, Altemeier had been serving as president-elect. He is also medical director for nine nursing homes in the Twin Cities and is on the faculty of the University of Minnesota, where he teaches a comprehensive course that he helped develop for nursing home medical directors.

Group Health Director

Henry Emmons, M.D., has been named director of professional services at Group Health's Mental Health Center. Emmons joined Group Health, Inc., in 1989 as a staff psychiatrist and has since served as interim department head at the Mental Health Center. He is also on the hospital staff at Riverside Medical Center in Minneapolis.

Places

Phillips Teaching and Research Center Opens

The Phillips Eye Institute inaugurated the opening of its Center for Teaching and Research in October. The center, which cost \$650,000 to

build, is a multifaceted, ophthalmic research and education facility. It is located in an 11,800 square-foot suite on the lower level of the Park Avenue Medical Office Building adjoining the Phillips Eye Institute.

The center is available to industry, ophthalmologists, and independent researchers to conduct applied research or upgrade surgical skills on a fee-for-use basis. As a teaching facility, it includes four operating room setups with surgical equipment and a viewing room connected via closed-circuit television. The center also includes conference rooms as well as teaching and lecture support services.

Mayo to Subsidize Tuition

Mayo Medical School is moving toward a goal of full tuition scholarships for its students by the year 2005. During the current school year, it is underwriting 14 percent of students' tuition.

"Tuition support attempts to lower student debt load and impact the societal issues of health care access and costs," says Mayo Medical School Dean Burton Sandok, M.D. Some feel high debt load influences the trend of medical school graduates choosing higher-paying specialties over lower-paying positions in family medicine, pediatrics, and internal medicine.

Virginia Piper Institute Receives Grant

Abbott Northwestern Hospital officials announced in November that The Kresge Foundation of Troy, Michigan, has approved a \$500,000 grant for the Virginia Piper Cancer Institute. Douglas Dayton, general chairman of the

institute's fund drive "Legacy and Promise," said the money will help fund the renovation, expansion, and equipping of the radiation oncology unit.

The Kresge Foundation awarded more than 120 grants in 1991 for a total of more than \$45 million. The foundation is an independent, private foundation created by the personal gifts of Sebastian S. Kresge. The grant to the Virginia Piper Cancer Institute was made on a challenge basis, contingent on raising the balance of the Legacy and Promise \$13 million goal. To date, \$10.3 million has been raised.

Abbott Northwestern announced the creation of the Virginia Piper Cancer Institute in May of this year. Piper was a long-time hospital board member and former board chair who died of cancer in 1988.

Fairview Milaca Converts Facilities

The boards of directors of the Fairview Milaca Hospital and Milaca Area Hospital District voted to convert the hospital to a full-scale ambulatory care center and medical clinic effective November 22. The conversion was originally planned to coincide with the opening of Fairview's new regional medical center in Princeton in 1993.

Until the new medical center in Princeton opens, Milaca-area residents requiring emergency services and inpatient care will be treated at Fairview Regional Hospital, which is 14 miles from Milaca.

Milaca's need for more outpatient services and declining use of hospitalization services prompted the decision, according to Glenn Erickson, regional administrator.

Socioeconomics

Park Nicollet, Methodist Affiliation

Park Nicollet Medical Center and Methodist HealthCare, parent company of Methodist Hospital,

have announced approval of an agreement to create a new affiliation under common management and governance. MHC Associates and Methodist Hospital Foundation will be subsidiaries of the new parent organization.

Park Nicollet and Methodist HealthCare's leaders see the affiliation as a step toward the integration of inpatient and outpatient services into a coordinated system of care.

Methodist Hospital and Park Nicollet Medical Center will maintain their separate identifications and structures, and the hospital's medical staff will continue to be open to all physicians in the community.

State Health Worker Layoffs

The Minnesota Department of Health was forced to lay off 29 nursing home and hospital inspectors and investigators because of a shortfall of \$3 million in federal and state funds for inspections. As *Minnesota Medicine* went to press, the layoff was scheduled for December 31.

The department hired 43 new inspectors in August after federal officials indicated that the department's list of expanded surveys would be approved. Because of seniority, most of those laid off were new employees.

The cuts will reduce the department's ability to oversee the quality of care in hospitals and nursing homes, said Mike Tripple, assistant director of the department's health resources division. Among other things, the department will lose its ability to provide training to hospital and nursing home staffs, he said.

Health Care Costs for Seniors

Three of Minnesota's HMOs announced increases in Medicare premiums for 1992, while two announced reductions for some members. Group Health Seniors is reducing premiums by about 15 percent, with monthly costs going from \$45.75 to \$38.75 starting February 1. Group Health was able

to reduce rates by dropping its coverage of prescription drugs.

Blue Plus Medicare is reducing its premiums for subscribers aged 65 to 69 starting January 1. However, most subscribers over age 69 will see rate increases. Blue Plus joins PHP and MedCenters in charging higher rates for older Medicare enrollees.

Other HMOs announced sharp increases in Medicare premiums, saying Medicare reimbursements haven't increased enough to cover rising health care costs.

Share Senior Care increased its premiums by 23 percent, with monthly costs going from \$39.95 to \$48.95 effective January 1.

PHP Plus Medicare's premiums, which are based on age, ranged from \$47.50 to \$69.50 per month in 1991. On January 1, the range increased to \$59.75 to \$87.

MedCenters charged \$59.95 in 1991, but it began using an age-sex rating system January 1. Its new premiums range from \$64.95 to \$69.75.

Soaring medical costs could destroy the financial security of future retirees, according to a report by the Northwestern National Life Insurance Company. The Minneapolis-based insurer warned that the nation must cut rapidly increasing medical costs and determine who will pay the high retiree medical bills.

In a national survey of 500 workers over age 40, the company found that most people surveyed believe they will be well prepared for retirement, failing to recognize that medical bills could quickly deplete their assets.

Child Mental Health Program Failing in Ramsey

Ramsey County's mental health programs for children are failing, according to an advisory council created by the Legislature to monitor county efforts. The program is inaccessible because it must struggle to control costs, said council members.

Some county officials blamed the state for the problems because it required counties to provide mental health care but provided no money. The county faces diminished funding from state and federal sources, as well as limits on property tax levies, and can, therefore, only shift funding between needy populations, said Commissioner Diane Ahrens.

The advisory council recommended that the County Board identify services to children as a top priority and start active partnerships with schools and other agencies; that the Community Human Services Department determine whether it is cost effective to place children in foster care if residential treatment offers more effective intervention; that the department develop training standards for social workers, especially on cross-cultural values; and that the board appropriate money for crisis services.

Innovations

M-Gus Treated by Replacing Plasma

Mayo Clinic researchers have confirmed that the crippling disease M-Gus can be reversed by replacing the patient's plasma. M-Gus, a form of polyneuropathy, severely damages nerves in the arms and legs.

In a double-blind study, Mayo researchers replaced 19 M-Gus patients' plasma with artificial plasma consisting of saline solution and albumin, a protein common in animal tissue. Twenty patients received a sham treatment.

Some patients who were unable to walk before the study were able to walk again after the plasma exchange, said Peter James Dyck, director of Mayo's Peripheral Neuropathy Research Laboratories. The researchers suspect the treatment works because the antibodies that attack the nerves are discarded with the plasma.

Nerve function in the patients

who received the real treatment improved six times as much as in those who got the sham treatment, and their muscle strength improved 10 times as much. The patients who received the sham treatment were offered the real treatment after the study.

Heart Pumps Successful

Mechanical assist devices have had spectacular success rates at the Minneapolis Heart Institute, according to a report the institute presented at the American Heart Association's annual meeting in November. The institute has one of the best success rates in the nation: All 13 patients with mechanical assist devices lived to receive new hearts. Three of 10 candidates for heart transplants typically die before they get a new heart. Mechanical assist devices, which the FDA still considers experimental, can potentially improve these numbers.

Nine of the 13 Heart Institute patients are still alive, one died after 28 months, and three died within a year after receiving donor hearts.

TPA May Save Frostbitten Limbs

The clot-busting drug TPA has saved four severely frostbitten patients at Hennepin County Medical Center from amputation, said physicians. The drug, typically used to stop heart attacks, restored circulation to the patients' thawed hands and feet.

The FDA has authorized John Twomey, M.D., a surgeon at the hospital, to test the therapy on six patients. Three of the first four needed no amputation after receiving TPA. The fourth patient lost four fingers on one hand and one on the other, but without treatment, he would have lost both legs below the knee and possibly both hands, said Twomey.

Because it's impractical to

administer TPA to all frozen areas of patients, Twomey said physicians gave priority to the most important limb—such as the right hand in right-handed people. But the physicians were surprised to find that the drug also reached other limbs, said Twomey.

Other clot-dissolving drugs such as urokinase and streptokinase, which cost far less than TPA, will probably be tested later if TPA proves successful, said Twomey.

Medical Research

Emergency Care Futile for Cardiac Arrest Victims

Virtually all people who suffer cardiac arrest and cannot be revived by rescue workers will die and should not be taken to a hospital, according to a study published in the November 14 issue of *The New England Journal of Medicine*. Even if the patient can be revived in an emergency room, there is almost no chance the patient will live to leave the hospital. Researchers recommended that rescuers declare such patients dead at the scene rather than subjecting them to dehumanizing and costly hospital treatment.

The researchers reviewed 185 cardiac arrest victims brought to Rhode Island Hospital in Providence during a 19-month period. Only 16 of the patients were revived, only one regained consciousness, and none lived to be discharged from the hospital.

Heart Drug Poses Risk

Digitalis, one of the oldest and most widely used heart drugs, increased the risk of sudden cardiac death in people who had survived a heart attack, according to a study reported at the American Heart Association annual meeting in November. Researchers also found that beta blockers help prevent sudden death. About 25 percent of the 1 million Americans who survive heart attacks each year are treated with digitalis.

Beta Carotene Reduces Women's Health Risks

One serving per day of foods rich in beta carotene, such as carrots, spinach, and apricots, cuts women's risk of stroke by 40 percent and heart attack by 22 percent, reported doctors at the American Heart Association's annual meeting in November. Women who took vitamin E supplements had a 36 percent lower risk of heart attack and a slightly lower risk of stroke than women who took less than the U.S. recommended daily allowance of the vitamin. The study monitored 87,245 nurses starting in 1976.

AIDS Update

.....

CDC Drops Plan

Because of strong opposition, the Centers for Disease Control decided not to draft a list of exposure-prone procedures that HIV-infected health care workers should not perform. Critics argued that there is no scientific reason to ban infected health care workers from performing such procedures. The CDC's new draft guidelines suggest instead that emphasis be placed on identifying infected health workers who do not meet standards of infection control or whose stamina or mental state makes them unfit to practice. The draft also suggests that local panels decide on a case-by-case basis whether health care workers should perform particular procedures. The guidelines continue to oppose mandatory testing.

Louis Sullivan, M.D., secretary of Health and Human Services, must approve the change.

BMP Proposes HIV Testing Plan

The Minnesota Board of Medical Practice has proposed voluntary AIDS testing guidelines for physicians who perform exposure-prone procedures and has asked the

Minnesota Legislature to adopt the plan.

The BMP proposal would give the board broad power to regulate the practice of health care workers infected with HIV. The Minnesota Medical Association Board of Trustees voted to oppose the BMP's plan and gave approval for the MMA staff to develop a legislative proposal for oversight of infection-control practices in the health care setting.

The BMP plan proposes that physicians who do surgical and other exposure-prone procedures undergo voluntary testing; that doctors with AIDS stop doing exposure-prone procedures; and that the board have legal authority to make unannounced inspections of physician offices.

Minnesota Study Calls For Caution

Authorities should be cautious about notifying patients of HIV-infected physicians, recommended Minnesota officials in the November 14 *New England Journal of Medicine*. In a study conducted primarily by experts from the Minnesota Department of Health, officials said that under most circumstances, it is unnecessary to notify and test patients who were treated by infected physicians. Such look-back investigations are too costly and unproductive to conduct routinely, the authors concluded.

According to the report, notification should be considered only in three cases: 1) It should be mandatory when a health care worker has spread the virus to a patient; 2) it should be considered when there is evidence that a health care worker has violated standard infection-control practices while infected with HIV (this guideline applied to the Philip Benson, M.D., case last summer); and 3) it may be considered for some studies designed to define more clearly the risk of transmitting HIV from health care worker to patient.

U Proposal Would Require Testing

Under a proposal released in November, physicians at the

University of Minnesota Hospital and Clinic who perform exposure-prone procedures would be required to sign a document every two years certifying that they have tested negative for HIV. Frank Rhame, M.D., the hospital's infection control chief, recommended the proposal, which must pass through hospital committees before it can become policy.

Some Docs Reluctant to Treat AIDS

In a survey of 2,004 internists and general and family practitioners, almost one-third said they do not feel a responsibility to treat people with AIDS. Half said they would not work with AIDS patients if they had a choice.

Authors of the article, which appeared in the November 27 *Journal of the American Medical Association*, traced the results partially to a bias against homosexuals and intravenous drug users—those affected most by AIDS. In the survey, 35 percent agreed with the statement that they “would feel nervous among a group of homosexuals,” and 55 percent said they would feel uncomfortable having intravenous drug users as patients.

The physicians also had other worries. Eighty-three percent said they needed more information about AIDS, and 84 percent agreed that caring for people with AIDS puts extra demands on their time.

The AMA believes physicians have a responsibility during an epidemic to treat the ill regardless of the risk, and in 1988, the AMA stated that it is unethical for a physician to refuse treatment because a patient is infected with the AIDS virus.

MM

A Calendar of Continuing Medical Education Courses

Provided through the MMA Medical Education Subcommittee on CME Resources. For assistance with scheduling meetings or for information on future medical meetings and CME courses, please contact the MMA office: 2221 University Avenue SE, Suite 400, Minneapolis, Minnesota 55414; 612/378-1875. Information for each entry is arranged by date; name of program; primary sponsor; location; contact person.

JANUARY 1992

Jan. 6-10 **Team Management of Diabetes Mellitus** International Diabetes Center; International Diabetes Center, Minneapolis, MN. CONTACT: Cindy Poppitz, International Diabetes Center, 5000 West 39th Street, Minneapolis, MN 55416; 612/927-3393.

Jan. 11 **Teen Program Seminar (Pediatric and Mental Health Topics)** Group Health Inc.; Minneapolis Metrodome Hilton, Minneapolis, MN. CONTACT: Debbie Bladine, Group Health Inc., 2829 University Avenue SE, Minneapolis, MN 55414; 612/623-8479.

Jan. 16 **Promoting Fitness** Group Health Inc.; Minneapolis Metrodome Hilton, Minneapolis, MN. CONTACT: Debbie Bladine, Group Health Inc., 2829 University Avenue SE, Minneapolis, MN 55414; 612/623-8479.

Jan. 16-31 **South Pacific Medical Education Seminar** INTRAV, North Central Medical Conference; Fiji, New Zealand, Australia, Great Barrier Reef. CONTACT: North Central Medical Conference, 1845 Hampshire Avenue #200, St. Paul, MN 55116.

Jan. 18 **Rehabilitation** Group Health Inc.; Minneapolis Metrodome Hilton, Minneapolis, MN. CONTACT: Debbie Bladine, Group Health Inc., 2829 University Avenue SE, Minneapolis, MN 55414; 612/623-8479.

Jan. 25-Feb. 4 **Trans-Panama Canal Medical Education Seminar** INTRAV, North Central Medical Conference; Acapulco, Costa Rica, Curacao, St. Croix, St. Thomas, and San Juan. CONTACT: North Central Medical Conference, 1845 Hampshire Avenue #200, St. Paul, MN 55116.

Jan. 27-31 **Team Management of Diabetes Mellitus** International Diabetes Center; International Diabetes Center, Minneapolis, MN. CONTACT: Cindy Poppitz, International Diabetes Center, 5000 West 39th Street, Minneapolis, MN 55416; 612/927-3393.

FEBRUARY 1992

Feb. 5-12 **HealthEast Winter Medical Seminar** HealthEast; Hawaii. CONTACT: Lisa Harrell, 1700 University Avenue, St. Paul, MN 55104; 612/641-5112.

Feb. 6 **Kidney Stones—Treatment, Prevention** Group Health Inc.; Minneapolis Metrodome Hilton, Minneapolis, MN. CONTACT: Debbie Bladine, Group Health Inc., 2829

University Avenue SE, Minneapolis, MN 55414; 612/623-8479.

Feb. 6-9 **Prostatic Diseases: Current Concepts in Diagnosis and Management** Mayo Clinic/Mayo Foundation; The Breakers, Palm Beach, FL. CONTACT: Rita Kunz or Jan Fleck, Mayo Clinic, 200 1st Street SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

Feb. 7 **Domestic Violence: Assessment and Plan for Physician Action** St. Paul-Ramsey Medical Center; Holiday Inn East, St. Paul, MN. CONTACT: Bonnie Young, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

Feb. 8-9 **Fourth Annual Issues in Pediatrics** Children's Hospital and Fargo Clinic MeritCare; Arrowwood Resort, Alexandria, MN. CONTACT: Sue Heinze, 720-Fourth Street North, Fargo, ND 58102; 701/234-5737.

Feb. 10-14 **Team Management of Diabetes Mellitus** International Diabetes Center; International Diabetes Center, Minneapolis, MN. CONTACT: Cindy Poppitz, International Diabetes Center, 5000 West 39th Street, Minneapolis, MN 55416; 612/927-3393.

Feb. 14 **Burn Care Today** St. Paul-Ramsey Medical Center; Holiday Inn East, St. Paul, MN. CONTACT: Bonnie Young, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

Feb. 14-23 **Primary Care Update** Office of CME, University of Minnesota Medical School; Hotel Sanur Beach, Bali, INDONESIA. CONTACT: Bart Galle, Office of CME, Radisson Hotel Metrodome, Suite 107, 615 Washington Avenue SE, Minneapolis, MN 55414; 612/626-7600.

Feb. 15-22 **HealthEast Winter Medical Seminar** HealthEast; Steamboat Springs, CO. CONTACT: Lisa Harrell, 1700 University Avenue, St. Paul, MN 55104; 612/641-5112.

Feb. 20 **Newer Antibiotics in Our Basic Armamentarium** Group Health Inc.; Minneapolis Metrodome Hilton, Minneapolis, MN. CONTACT: Debbie Bladine, Group Health Inc., 2829 University Avenue SE, Minneapolis, MN 55414; 612/623-8479.

Feb. 21-22 **Sexual Attitude Reassessment Seminars (SAR)** Program in Human Sexuality; Holiday Inn Metrodome, Minneapolis, MN. CONTACT: SAR Coordinator or Secretary, Program in Human Sexuality, FMC Building, 1300 South 2nd Street, Minneapolis, MN 55454.

Feb. 26-27 **Geriatric Drug Therapy Symposium** Office of CME, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of CME, Radisson Hotel Metrodome, Suite 107, 615 Washington Avenue SE, Minneapolis, MN 55414; 612/626-7600.

Feb. 28 **Prevention and Management of Atherosclerotic Diseases** Office of CME, University of Minnesota Medical

School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of CME, Radisson Hotel Metrodome, Suite 107, 615 Washington Avenue SE, Minneapolis, MN 55414; 612/626-7600.

M A R C H 1 9 9 2

March 5 **Medical Aspects of Drug Abuse—Cocaine** Group Health Inc.; Minneapolis Metrodome Hilton, Minneapolis, MN. CONTACT: Debbie Bladine, Group Health Inc., 2829 University Avenue SE, Minneapolis, MN 55414; 612/623-8479.

March 6-7 **Cutaneous Laser Surgery** Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

March 9-13 **Medical Update 1992** Office of CME, Department of Surgery, University of Minnesota Medical School; Hughes Education and Conference Center, Holy Cross Hospital, Fort Lauderdale, FL. CONTACT: Becky Noren, Office of CME, Radisson Hotel Metrodome, Suite 107, 615 Washington Avenue SE, Minneapolis, MN 55414; 612/626-7600, or 800/888-8642.

March 12-13 **Family Practice Today** St. Paul-Ramsey Medical Center; Holiday Inn East, St. Paul, MN. CONTACT: Bonnie Young, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

March 13-18 **Neurology in Clinical Practice** Mayo Clinic/Mayo Foundation; Capiva, FL. CONTACT: Rita Kunz or Jan Fleck, Mayo Clinic, 200 1st Street SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

March 14 **Ob/Gyn Seminar** Group Health Inc.; Minneapolis Metrodome Hilton, Minneapolis, MN. CONTACT: Debbie Bladine, Group Health Inc., 2829 University Avenue SE, Minneapolis, MN 55414; 612/623-8479.

March 19 **Common Skin Disorders** Group Health Inc.; Minneapolis Metrodome Hilton, Minneapolis, MN. CONTACT: Debbie Bladine, Group Health Inc., 2829 University Avenue SE, Minneapolis, MN 55414; 612/623-8479.

March 20 **Annual Occupational Medicine Update** St. Paul-Ramsey Medical Center; Minneapolis Metrodome Hilton, Minneapolis, MN. CONTACT: Bonnie Young, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

March 20-21 **Advanced Laparoscopic Abdominal Surgery Seminar** Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

March 21-22 **Sexual Attitude Reassessment Seminars (SAR)** Program in Human Sexuality; Holiday Inn Metrodome, Minneapolis, MN. CONTACT: SAR Coordinator or Secretary, Program in Human Sexuality, FMC Building, 1300 South 2nd Street, Minneapolis, MN 55454; 612/625-1500.

March 26-27 **Critical Care: Practical Approaches & Case**

Discussion St. Paul-Ramsey Medical Center; Holiday Inn East, St. Paul, MN. CONTACT: Bonnie Young, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

March 28 **Teen Program Seminar (Pediatric and Mental Health Topics)** Group Health Inc.; Minneapolis Metrodome Hilton, Minneapolis, MN. CONTACT: Debbie Bladine, Group Health Inc., 2829 University Avenue SE, Minneapolis, MN 55414; 612/623-8479.

A P R I L 1 9 9 2

April 2-3 **Allergy and Clinical Immunology** Office of CME, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of CME, Radisson Hotel Metrodome, Suite 107, 615 Washington Avenue SE, Minneapolis, MN 55414; 612/626-7600.

April 2-3 **Annual Obstetrics and Gynecology Update** St. Paul-Ramsey Medical Center; Holiday Inn East, St. Paul, MN. CONTACT: Bonnie Young, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

April 3 **ENT Update** St. Paul-Ramsey Medical Center; St. Joseph's Hospital, St. Paul, MN. CONTACT: Bonnie Young, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

April 6-7 **Annual Ophthalmology Course** Office of CME, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of CME, Radisson Hotel Metrodome, Suite 107, 615 Washington Avenue SE, Minneapolis, MN 55414; 612/626-7600.

April 10-11 **Advanced Laparoscopic Abdominal Surgery Seminar** Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

April 16 **Spondyloarthropathies** Group Health Inc.; Minneapolis Metrodome Hilton, Minneapolis, MN. CONTACT: Debbie Bladine, Group Health Inc., 2829 University Avenue SE, Minneapolis, MN 55414; 612/623-8479.

April 24-25 **Sexual Attitude Reassessment Seminars (SAR)** Program in Human Sexuality; Holiday Inn Metrodome, Minneapolis, MN. CONTACT: SAR Coordinator or Secretary, Program in Human Sexuality, FMC Building, 1300 South 2nd Street, Minneapolis, MN 55454; 612/625-1500.

April 27-29 **Bone & Soft Tissue Tumors** Mayo Clinic/Mayo Foundation; Hilton Beach & Tennis Resort, San Diego, CA. CONTACT: Postgraduate Courses, Mayo Clinic/Mayo Foundation, 200 First Avenue SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

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Spring Conference Schedule

1992

February 7	Domestic Violence, A Focus on Adult Women, St. Paul
February 14	Burn Care Today, St. Paul
March 12-13	Family Medicine Update, St. Paul
March 20	Occupational Medicine Update, St. Paul
March 26-27	Critical Care: Practical Approaches & Case Discussions, St. Paul
April 2-3	OB/Gyn Update, St. Paul
April 3	ENT Update for Primary Care Physicians, St. Paul

Information and Registration

Continuing Medical Education, St. Paul-Ramsey Medical Center,
640 Jackson Street, St. Paul, MN 55101; Phone 612/221-3992.

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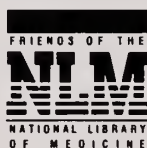
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Internist to join a progressive 13-physician group practice. Rural college town 30 miles from St. Paul, Minnesota. New clinic and constructing new hospital. Contact: Robert B. Johnson, M.D., River Falls, WI 54022; 715/425-6701. (*9/91-R)

Urgent Care/Primary Care physicians for over 90 group positions in metropolitan Phoenix/Tucson, Arizona. Excellent compensation/partnership opportunities. Other quality positions nationwide. Send CV or call: Mitch Young (MM), PO Box 1804, Scottsdale, AZ 85252; 602/990-8080. (*1/90-R)

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Family Physicians: Well-established south suburban Minneapolis family practice group seeks associates part/full time to staff day clinic. Excellent call schedule, salary, and fringe benefits. Also seeking locum tenens to staff PT/FT Urgent Care Centers and/or day clinic. Contact: Administration, Family Physicians, P.A., 612/435-4125, or send inquiries to Suite 100, 14050 Nicollet Avenue South, Burnsville, MN 55337. (*9/89-R)

Mankato Clinic, Ltd. is seeking BC/BE physicians in the following specialties: dermatology, gastroenterology, invasive cardiology, occupational medicine, oncology/hematology, ophthalmology, pulmonary medicine, family practice, and general internal medicine. The Mankato Clinic is a 50-physician multispecialty group practice in south-central Minnesota with a trade-area population of +250,000. Guaranteed salary first year, incentive thereafter with full range of benefits and liberal time off. For more information call: Roger Greenwald, Administrator, or Dr. B. C. McGregor, 507/625-1811 or 800/657-6944, or write: 501 Holly Lane, Mankato, MN 56001. (12/91-R)

BC/BE Family Practice and Ob/Gyn Physician: Excellent opportunity to join well-established, progressive, 20-physician multispecialty group located in an economically sound community of 20,000 (drawing area of 40,000), 65 miles south of the Twin Cities. Full membership after one year. Competitive salary and fringe benefits package. Contact: Ed Durst, M.D., or Terry Tone, Administrator, 134 Southview, Owatonna, MN 55060; 507/451-1120. (8/91-R)

Forest Lake Doctor's Clinic is seeking a BC/BE family physician, pediatrician, ob/gyn, and internist to join 10-physician multispecialty group. Located 25 miles north of Minneapolis-St. Paul in progressive community with excellent schools, many beautiful lakes, recreational activities, golf, fishing, boating, skiing. Local hospital directly across street. Contact: Dr. Harvey J. Frank or Dr. Doug Sill, 121 SE 11th Avenue, Forest Lake, MN 55025; 612/464-7100. (4/90-R)

Lake City, Minnesota: Family physician BC/BE needed to join three other FPs in progressive, growing practice on Lake Pepin/Mississippi River in southeastern Minnesota. Excellent first-year salary/benefits in a scenic community with multiple recreational opportunities. Contact: D.D. Pflaum, M.D., 303 South Washington, Lake City, MN; 612/345-3318. (8/90-R)

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MDsearch assists medical groups and hospitals in their recruiting efforts. For confidential information on opportunities in the Upper Midwest, send CV and/or call collect: Mary Jo Cordes, MDsearch, PO Box 21507, St. Paul, MN 55121; 612/454-7291. (12/91-R)

Wisconsin: 120-physician multispecialty clinic in the Fox River Valley of northeastern Wisconsin desires two BC/BE pediatricians to join department of 15 BC/BE pediatricians. Excellent compensation and benefits package, leading to shareholder status after two years. The community offers a superb recreational, cultural, and family environment in which to practice. For information please call or write: Howard Kidd, M.D., La Salle Clinic, 411 Lincoln Street, Neenah, WI 54956; 414/727-4276. (3/91-R)

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Physician: BC in emergency medicine, experienced in FP (no ob), and licensed in Minnesota, South Dakota, Wisconsin, available for locum tenens coverage. Reply to: Minnesota Medicine (850), 2221 University Avenue SE, Suite 400, Minneapolis, MN 55414. (5/91-R)

Internal Medicine, Pediatrics, and Dermatology practice opportunities available at the Faribault Clinic. The Faribault Clinic is a multispecialty group practice of 19 physicians. Faribault is located 50 miles south of Minneapolis on I-35. For more information contact: Ray W. Wood, M.D., or Ken Smith, Administrator, 924 NE First Street, Faribault, MN 55021; 507/334-3921. (4/90-R)

Stillwater: Multispecialty group with emphasis on primary care seeking BC/BE family physician, pediatrician, and internist. Scenic location with excellent school system,

supportive medical community with strong local hospital, competitive salary and benefits. Send CV to: Jon Petersen, St. Croix Valley Clinic, 921 Greeley, Stillwater, MN 55082; 612/439-2215. (12/92-R)

Family Physician wanted to join five-physician, two-P.A., two-site family practice group in St. Anthony and Shoreview. Ob available. Competitive salary, benefits package, and call schedule. Contact: Gerald Pitzl, M.D., Silver Lake Clinic PA, 612/788-9251. (7/91-R)

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William Gladstone's home, 906/563-8743. Anderson Memorial Hospital, Main Street, Norway, MI 49870; 906/563-9243. *3-1/92

Pediatrics: Marshfield Clinic, a 400-physician multispecialty group practice, is seeking BC/BE pediatricians to join expanding regional centers in Chippewa Falls and Rice Lake, Wisconsin. These are beautiful, wooded Wisconsin areas with an abundance of lakes, rivers, and streams. Both communities offer a thriving economic environment, clean air, low crime, excellent schools and exceptional four-season recreation. Chippewa Falls is a community of 22,000 with 8,000 to 10,000 permanent residents living around adjacent Lake Wissota. It borders Eau Claire, Wisconsin, a city of nearly 80,000 that includes a major campus of the University of Wisconsin. Rice Lake is a lakeside community of 8,500 people. In addition to excellent primary and secondary schools, both public and parochial, educational opportunities include a UW Center and VTAE campus. Both opportunities have beautiful new clinic buildings situated adjacent to comparably modern and progressive hospitals. In addition to their many local resources, the nearby proximity of major metropolitan areas (i.e., 1 1/2 hours from Minneapolis/St. Paul) provides a catalog of readily accessible cultural activities, shopping, fine dining, and professional spectator sports. Each opportunity has its own special qualities with more attractive features relative to individual needs and preferences. Emphasis on lifestyle and quality practice is combined with a guaranteed salary and outstanding fringe benefits package. If this combina-

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Eugene, Oregon. BC/BE Internist to join well-established, 44-physician, primary-care group. Excellent schools. Abundant cultural and recreational opportunities. Near Cascade Mountains and coast. Home of University of Oregon. Please send CV to David Strutin, M.D., Oregon Medical Group, 495 Oakway Road, Eugene, Oregon, 97401; or call 503/342-2134. 3-1/92

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Family Practice Wisconsin: Physician needed for partnership in broad-based primary care practice in exceptional south-central community. Shared call, fully equipped and staffed office, very competitive guaranteed salary, and comprehensive benefits package. For information on this and other opportunities in the Upper Midwest, contact and send CV to: Mary Jo Cordes, President, MDsearch, PO Box 21507, St. Paul, MN 55121; or call: 612/454-7291. Fax: 612/454-7277.
*4-3/92

Orthopedic Surgeon, Minneapolis: BC/BE orthopedic surgeon needed to join the Department of Orthopedic Surgery of a 340-physician multispecialty medical clinic in desirable Twin Cities area. Our medical clinic is a highly reputable, well-established clinic that has been in existence for over 40 years. Teaching and clinical research are encouraged, and salary and benefits are highly competitive. Send CV and letters of inquiry to: Patrick Moylan, Park Nicollet Medical Center, 5000 West 39th Street, Minneapolis, MN 55416.
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Medical Ophthalmologist needed to join a 340-physician, multispecialty medical clinic in the attractive Minneapolis-St. Paul area. Full or part time will be considered. Send CV and letter of inquiry to: J. Timothy Diegel, M.D., Chairman, Ophthalmology, Park Nicollet Medical Center, 5000 West 39th Street, Minneapolis, MN 55416; 612/569-4830.
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Internal Medicine: Immediate opportunity available for BC/BE internist to join a well-established, 85-physician, multispecialty group practice in the metro Twin Cities area. Excellent compensation and benefits package. Contact: Nancy Borgstrom, Aspen Medical Group, 1020 Bandana Boulevard West, St. Paul, MN 55108; 612/641-7170. EOE.
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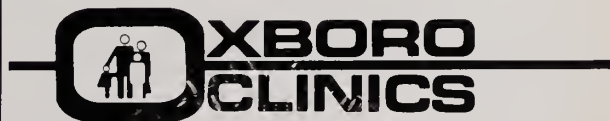
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age. For further information contact: John Bordwell, M.D., 9055 Springbrook Drive, Coon Rapids, MN 55433; 612/780-9155.
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Family Practice: BC/BE family practitioner to join 21-person family practice department that is part of a 45-person multispecialty group located in the northern suburbs of Minneapolis. Practice opportunities available in rural and suburban locations. Highly competitive first-year guaranteed salary, production-based compensation, and exceptional benefits package. Respond with CV to: Penny Magnuson, M.D., 9055 Springbrook Drive, Coon Rapids, MN 55433; 612/780-9155.
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Family Practice—Minnesota: Enjoy the benefits of country living yet have the resources of a major metropolitan area close at hand. Health One Buffalo Hospital is seeking a family physician to join two FPs and a nurse practitioner in its clinics in Annandale and Winsted. Share call with five physicians. Competitive compensation with excellent benefits including year-round outdoor recreation in "the heart of the lakes." Contact: Kim Isenberg, Health One Buffalo Hospital, 303 Catlin Street, PO Box 609, Buffalo, MN 55313; 612/682-1212, Ext. 245. 6-6/92

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June 10-12

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June 17-20



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BRIEF SUMMARY

Contraindications: Severe LV dysfunction (see *Warnings*), hypotension (systolic pressure < 90 mm Hg) or cardiogenic shock, sick sinus syndrome (if no pacemaker is present), 2nd- or 3rd-degree AV block (if no pacemaker is present), atrial flutter/fibrillation with an accessory bypass tract (eg, WPW or LGL syndromes), hypersensitivity to verapamil.

Warnings: Verapamil should be avoided in patients with severe LV dysfunction (eg, ejection fraction < 30%) or moderate to severe symptoms of cardiac failure and in patients with any degree of ventricular dysfunction if they are receiving a beta-blocker. Control milder heart failure with optimum digitalization and/or diuretics before Calan SR is used. Verapamil may occasionally produce hypotension. Elevations of liver enzymes have been reported. Several cases have been demonstrated to be produced by verapamil. Periodic monitoring of liver function in patients on verapamil is prudent. Some patients with paroxysmal and/or chronic atrial flutter/fibrillation and an accessory AV pathway (eg, WPW or LGL syndromes) have developed an increased antegrade conduction across the accessory pathway bypassing the AV node, producing a very rapid ventricular response or ventricular fibrillation after receiving I.V. verapamil (or digitalis). Because of this risk, oral verapamil is contraindicated in such patients. AV block may occur (2nd- and 3rd-degree, 0.8%). Development of marked 1st-degree block or progression to 2nd- or 3rd-degree block requires reduction in dosage or, rarely, discontinuation and institution of appropriate therapy. Sinus bradycardia, 2nd-degree AV block, sinus arrest, pulmonary edema and/or severe hypotension were seen in some critically ill patients with hypertrophic cardiomyopathy who were treated with verapamil.

Precautions: Verapamil should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) or impaired renal function, and patients should be monitored for abnormal prolongation of the PR interval or other signs of overdosage. Verapamil may decrease neuromuscular transmission in patients with Duchenne's muscular dystrophy and may prolong recovery from the neuromuscular blocking agent vecuronium. It may be necessary to decrease verapamil dosage in patients with attenuated neuromuscular transmission. Combined therapy with beta-adrenergic blockers and verapamil may result in additive negative effects on heart rate, atrioventricular conduction and/or cardiac contractility; there have been reports of excessive bradycardia and AV block, including complete heart block. The risks of such combined therapy may outweigh the benefits. The combination should be used only with caution and close monitoring. Decreased metoprolol and propranolol clearance may occur when either drug is administered concomitantly with verapamil. A variable effect has been seen with combined use of atenolol. Chronic verapamil treatment can increase serum digoxin levels by 50% to 75% during the first week of therapy, which can result in digitalis toxicity. In patients with hepatic cirrhosis, verapamil may reduce total body clearance and extrarenal clearance of digoxin. The digoxin dose should be reduced when verapamil is given, and the patient carefully monitored. Verapamil will usually have an additive effect in patients receiving blood-pressure-lowering agents. Disopyramide should not be given within 48 hours before or 24 hours after verapamil administration. Concomitant use of flecainide and verapamil may have additive effects on myocardial contractility, AV conduction, and repolarization. Combined verapamil and quinidine therapy in patients with hypertrophic cardiomyopathy should be avoided, since significant hypotension may result. Concomitant use of lithium and verapamil may result in a lowering of serum lithium levels or increased sensitivity to lithium. Patients receiving both drugs must be monitored carefully. Verapamil may increase carbamazepine concentrations during combined use. Rifampin may reduce verapamil bioavailability. Phenobarbital may increase verapamil clearance. Verapamil may increase serum levels of cyclosporin. Verapamil may inhibit the clearance and increase the plasma levels of theophylline. Concomitant use of inhalation anesthetics and calcium antagonists needs careful titration to avoid excessive cardiovascular depression. Verapamil may potentiate the activity of neuromuscular blocking agents (curare-like and depolarizing); dosage reduction may be required. There was no evidence of a carcinogenic potential of verapamil administered to rats for 2 years. A study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. Pregnancy Category C. There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor, and delivery only if clearly needed. Verapamil is excreted in breast milk; therefore, nursing should be discontinued during verapamil use.

Adverse Reactions: Constipation (7.3%), dizziness (3.3%), nausea (2.7%), hypotension (2.5%), headache (2.2%), edema (1.9%), CHF, pulmonary edema (1.8%), fatigue (1.7%), dyspnea (1.4%), bradycardia: HR < 50/min (1.4%), AV block: total 1°, 2°, 3° (1.2%), 2° and 3° (0.8%), rash (1.2%), flushing (0.6%), elevated liver enzymes, reversible non-obstructive paralytic ileus. The following reactions, reported in 1.0% or less of patients, occurred under conditions where a causal relationship is uncertain: angina pectoris, atrioventricular dissociation, chest pain, claudication, myocardial infarction, palpitations, purpura (vasculitis), syncope, diarrhea, dry mouth, gastrointestinal distress, gingival hyperplasia, ecchymosis or bruising, cerebrovascular accident, confusion, equilibrium disorders, insomnia, muscle cramps, paresthesia, psychotic symptoms, shakiness, somnolence, arthralgia and rash, exanthema, hair loss, hyperkeratosis, macules, sweating, urticaria, Stevens-Johnson syndrome, erythema multiforme, blurred vision, gynecostasia, galactorrhea/hyperprolactinemia, increased urination, spotty menstruation, impotence.

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COVER

Family Violence, long recognized as a societal problem, is clearly a medical problem as well. Physicians treat thousands of battered women each year, and, says this month's cover story (page 19), they can help arrest the cycle of violence simply by asking compassionate questions and offering information. Reporting abuse is not necessarily straightforward, says the Medicine Law & Policy article (page 35), which describes the legal remedies available to battered women.

Cover illustration by Susan Nees, who lives in Athens, Georgia.

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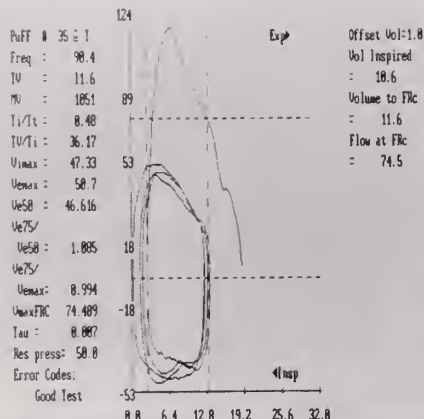
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Physicians Fight Family Violence

Edmund C. Burke, M.D.

One hundred thousand days of hospitalization, 30,000 emergency department visits, and 40,000 physician visits constitute the annual medical cost of family violence. "The home is actually a more dangerous place for American women than city streets," said U.S. Surgeon General Antonia C. Novello, M.D., at a news conference to announce the American Medical Association's National Campaign Against Family Violence, which is intended to heighten physician awareness of this major health problem.

Novello challenged physicians to take an active role in the "fight" against family violence. Physicians have traditionally had only minor involvement in addressing sexual abuse, spouse battering, and elder abuse, she said. "While doctors are often the first to see battered women, children, and the elderly, they lack the training and sensitivity to help arrest the violence."

According to this month's cover story (page 19), from 2 to 4 million women nationwide and 63,000 in Minnesota are physically abused each year by the men in their lives. By simply asking compassionate questions and offering information on resources for battered women, physicians can help women escape the violence, says the article. Also in this issue, the Medicine Law & Policy article (page 35) describes the legal remedies available to victims and outlines physicians' legal requirements for reporting, or not reporting, domestic abuse.

At its interim meeting in December, the AMA adopted council recommendations to recognize family violence as a medical problem. Physicians have an ethical obligation to intervene, concluded the associa-



"We must put an end to the tragic cycle of family violence."

tion, which advises physicians to familiarize themselves with protocols for diagnosing and treating domestic abuse.

As part of its effort to educate physicians about the problem, the AMA is sending letters to all physicians asking them to participate in a National Coalition of Physicians Against Violence. Coalition members will establish violence prevention committees to develop resource directories, distribute protocols, conduct educational programs, and lobby for state and federal legislation related to domestic violence.

As part of the AMA campaign, the association is establishing a national resource center and clearinghouse that will provide clinical protocols to help physicians diagnose, treat, and try to prevent continuing family violence. The center will also offer consultation and training on issues of family violence through conferences, working groups, and publications.

The protocols were distributed in January and are available from the AMA. Carole Warshaw, M.D., one of the authors and a psychiatrist,

internist, and former emergency physician at Cook County Hospital in Chicago, said, "Inquiry about abuse, even if specific indicators are not present, should become a standard part of medical care." The protocols give examples of how to ask women about abuse in an open and supportive manner.

The AMA campaign coincides with new standards set by the Joint Commission on the Accreditation of Healthcare Organizations to address domestic and elder abuse. The new standards, which took effect January 1, require all emergency and ambulatory care services to develop criteria to identify victims of abuse; collect, retain, and safeguard specimens, photographs, and other evidence of abuse; notify authorities when legally required; and refer victims to appropriate community services.

Our own state has some excellent programs for helping victims of domestic abuse. Susan Hadley, M.P.H., runs a program at Fairview Southdale Hospital in Edina called "WomanKind," which trains staff to identify battered women and provides victims with support and referrals. Since Hadley started the program in 1986, it has assisted more than 4,000 clients.

The Duluth Abuse Intervention Project has a coordinated system of responses to domestic violence, including court-mandated education and counseling for batterers and mandatory arrest if there is injury and sufficient evidence of abuse. The program follows abuse cases for several years to ensure that the system responds appropriately.

I urge you to do your part. It is our duty as physicians to treat all aspects of illness, and to do so we must put an end to the tragic cycle of family violence.

MM



"Being a patient advocate is what being a physician is all about."

Dr. Kevin Fullin, Cardiologist, Kenosha, Wisconsin, Member, American Medical Association

Why would a cardiologist get involved in the issue of family violence? Perhaps, because what he saw simply cried out for action.

"Fully a third of all women's injuries coming into our emergency rooms are no accident," says Dr. Fullin.

While others were content to downplay the issue of family violence, Dr. Fullin would not. He petitioned state officials, and through his efforts the first Domestic Violence Advocate Program in his state was created.

"Organized medicine must serve as an advocate for patients," stressed Dr. Fullin.

The American Medical Association (AMA) couldn't

agree more. We're committed to focusing physician attention on the issue of family violence.

You are invited to join Dr. Fullin and to join with him in his efforts to bring quality health care to those in need. Become a member of the American Medical Association today.

Members of the AMA are encouraged to join their state, county and specialty societies.

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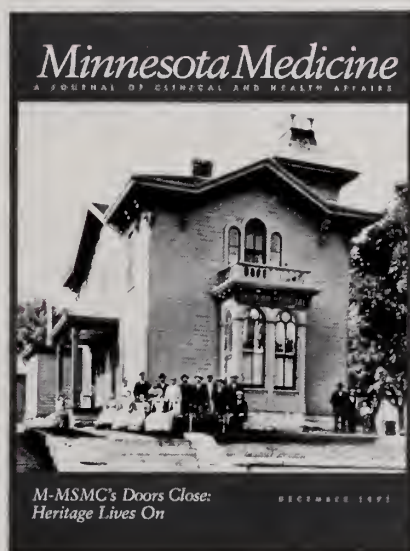


HCMC Shares Concern for Teenage Medical Assistance Patients

In a December letter to the editor ("Teenage Pregnancy and Infant Mortality," page 7), Dr. Alec L. Janes expressed concern that Hennepin and Ramsey county hospitals are denying services to teenage, indigent patients most at risk for problem pregnancies.

We share Dr. Janes' concern for this population and wish to express our own concern that while such was not the case at Hennepin County Medical Center when Dr. Janes wrote his letter, it may, in some instances, be the case now. The reason is complex and starts with the 1985 state mandate that all Medical Assistance recipients, including AFDC, select a managed care health plan, thereby eliminating access to care through the historical fee-for-service system. MA recipients were given three managed care plans from which to choose: PHP (now Medica), U-Care, and Metropolitan Health Plan (MHP), Hennepin County's own certified HMO.

Unfortunately, since the inception of the mandated program, HCMC has not been allowed to participate in the Medica hospital network. This has not meant that HCMC has denied care to Medica patients when they've presented at HCMC, but it has meant that Medica has denied reimbursement to HCMC for services rendered to Medica enrollees. Because many Medica enrollees had historically been HCMC patients, they continued to come here for care totalling more than \$1 million between 1985 and



1988. In 1989-90, another \$99,814 worth of patient services was delivered gratis to Medica enrollees.

Only recently, given the tough economic realities of managing a major tertiary teaching hospital that serves a broad spectrum of the community, was it decided to deny access (except in emergencies) to Medica MA enrollees, effective January 1992. Since September, we have implemented an aggressive educational program for "our patients" explaining that because our hospital is not part of the Medica network, they must select MHP as their managed care program if they wish to continue coming to HCMC. To date, 521 Medica enrollees have taken notice and changed their managed care affiliation to MHP.

HCMC's and Hennepin County's long-standing commitment to the teenage at-risk population is reflected in HCMC's preterm-birth prevention program, which has shown outstanding results for more than 250 clients over the past four years, and Pilot City Health Center's school-based

"mini-clinic," which has served thousands of high-risk pregnant teenagers during its 12-year history.

It is understandable that the general public, patients, and physicians are confused about the mandated managed care program and HCMC's role in it. Historically, HCMC's mission has been to serve the community at large, including its less fortunate members and at-risk populations. To fulfill this mission, HCMC must remain financially viable. We shall continue our efforts to explain this system to our patients so they can continue to be served here and we can be reimbursed for that service. Like Dr. Janes, we hope that "a concerted effort on the part of all concerned can be successful" both for the sake of the patients and the providers that serve them.

John W. Bluford
Deputy Administrator
Hennepin County Medical Center
and Director
Metropolitan Health Plan
Minneapolis, Minnesota

County Hospital Staffs Not Abandoning Patients

I would like to respond to the letter to the editor from Alec L. Janes, M.D., in the December 1991 issue of *Minnesota Medicine*. It is true that Hennepin County Medical Center and St. Paul-Ramsey Medical Center are no longer providers for AFDC/PHP patients, and this may, indeed, have an adverse impact on availability and continuity of care, especially for young, pregnant patients. However, the medical staffs at these institutions had nothing to do with the decision, which was made by PHP (Medica) for economic

reasons. It upsets me to think that some practitioners believe we are willfully abandoning our traditional clientele.

I am a dermatologist, not an obstetrician/gynecologist, but one of the reasons that I, and many of my HCMC colleagues, work for "the county" is because our underserved patient populations sorely need competent care. It feels good to provide such care. I believe most of us would prefer to provide care under AFDC/PHP. I hope the private sector will rise to the occasion and fill some of the needs this policy has created.

Cynthia L. Olson, M.D.

Staff dermatologist

*Hennepin County Medical Center
Minneapolis, Minnesota*

Show Up and Be Counted

The Minnesota Legislature and the United States Congress are currently in session. As the old adage goes, "Life, limb and property are not safe while either is in session." This year, the Minnesota Legislature will consider several health care issues that directly affect physicians and their practices (see this month's Face to Face interview with MMA Legislative Committee Chair Roger Becklund, M.D., page 13).

The problem is, as one state senator has said, "Those who show up get listened to," and physicians as a group do not show up at the Legislature. To "show up" means that you get to know your legislator and let him or her know your position on issues; you become active in your legislator's campaign; and you team up with our lobbyists from the Minnesota Medical Association and make rounds to important senators and representatives who are involved in particular legislation.

Most physicians feel removed from and disinterested in the legislative process. They are

frustrated by the slow-moving, muddled nature of the process, which is dominated by compromise. However, getting involved in the process is the best way to influence health care legislation.

Many physicians think nothing of spending an hour in the doctor's lounge moaning about "what the legislature is doing to us now" but will not join the MMA in its lobbying efforts or spend time talking to legislators. It is as simple as writing a letter, making a phone call, or showing up at the State Capitol while the Legislature is in session. It is simply not enough for physicians to hire lobbyists. The lobbyists do a remarkable job and are very adept at their profession, but hiring a lobbyist is similar to hiring someone to attend your child's school play—you cannot get parental credit for sending someone else. At the Legislature, there is no equal substitute for the physician. It is far more effective for a practicing physician who knows the ins and outs of the problem to tell the representative or senator exactly how the law will affect his or her practice and patients.

It is imperative that we, as physicians, get involved. Write letters, make phone calls, join and support the MMA and its lobbying efforts (even if you don't agree with 100 percent of its views), become involved in MEDPAC, pay attention to the elections in your district, and give money to those who support your views. Remember, none of us is too busy to pay attention to the issues that affect our ability to deliver quality medical care to our patients. Stop moaning in the doctor's lounge and show up and be counted.

John A. Dowdle, M.D., P.A.

*Orthopedic surgeon
University Park Medical Building
St. Paul, Minnesota*

Child Abuse Workshop

A new workshop for professionals who work with victims of child sexual abuse and perpetrators has been developed by local experts Ann Ahlquist, A.C.S.W., and Jane G. Gilgun, Ph.D. The workshop stresses both the theoretical understanding and the practical skills needed to be competent in one's role in a child sexual abuse case as social worker, attorney, guardian ad litem, or any professional who must make decisions about the issue of sexual abuse of children.

The seminar, called "The Fragile Relationship Between Victims and Perpetrators," is open to any professional concerned with the sexual abuse of children. It will be held from 8:30 a.m. to 4:30 p.m., February 7, 1992, at West River Point Conference Center, Minneapolis, and February 14, 1992, at Best Western Edgewater, Duluth. The fee is \$110 per person.

The seminar is designed for the various professionals who work together on child sexual abuse cases. It covers a broad spectrum of topics, including a look at the continuum of victim/perpetrator relationships, blocks to disclosure by the victim/survivor, legal issues, and an effective and legally competent model of interviewing children.

To register, or for a complete brochure, contact Campbell Meeting Management, 1437 Marshall, Suite 102, St. Paul, Minnesota 55104; 612/646-5060.

*Diane Campbell
Seminar Coordinator
Campbell Meeting Management
St. Paul, Minnesota*

AAOS Launches Campaign to Prevent Injury

The American Academy of Orthopaedic Surgeons has launched a national public education program on injury prevention. The initial phase concerns juvenile injuries sustained in recreational activities,

with an emphasis on playgrounds.

Last year, 237,000 children under age 15 were treated in hospital emergency rooms for injuries related to playground equipment, and many more were treated in physicians' offices. Focus group interviews have disclosed that the public is unaware of the large number of injuries related to playground equipment. The participants said physicians' caring image would be enhanced if the physicians presented information in their offices about preventing injury.

The academy is calling attention to the problem and to the playground safety guidelines of the U.S. Consumer Product Safety Commission in a "Play It Safe" poster and brochure.

Members of your medical association may be interested in distributing the information in their practices or reaching out to their local communities. For posters or brochures, contact the AAOS Department of Communications and Publications, 222 South Prospect Avenue, Park Ridge, IL 60068; 708/823-7186.

Robert Hensinger, M.D.
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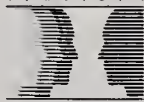
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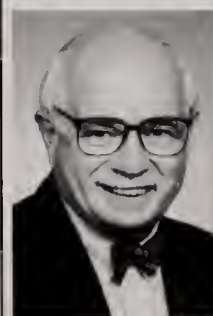
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2. Dosage should be reduced in patients with moderate to severe renal insufficiency.

3. In patients with normal renal function and uncomplicated hepatic dysfunction, the disposition of nizatidine is similar to that in normal subjects.

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Drug Interactions—No interactions have been observed with theophylline, chloridazepoxide, lorazepam, lidocaine, phenytoin, and warfarin. Axid does not inhibit the cytochrome P-450 enzyme system; therefore, drug interactions mediated by inhibition of hepatic metabolism are not expected to occur. In patients given very high doses (3,900 mg) of aspirin daily, increased serum salicylate levels were seen when nizatidine, 150 mg b.i.d., was administered concurrently.

Carcinogenesis, Mutagenesis, Impairment of Fertility—A 2-year oral carcinogenicity study in rats with doses as high as 500 mg/kg/day (about 80 times the recommended daily therapeutic dose) showed no evidence of a carcinogenic effect. There was a dose-related increase in the density of enterochromaffin-like (ECL) cells in the gastric oxyntic mucosa. In a 2-year study in mice, there was no evidence of a carcinogenic effect in male mice, although hyperplastic nodules of the liver were increased in the high-dose males as compared with placebo. Female mice given the high dose of Axid (2,000 mg/kg/day, about 330 times the human dose) showed marginally statistically significant increases in hepatic carcinoma and hepatic nodular hyperplasia with no numerical increase seen in any of the other dose groups. The rate of hepatic carcinoma in the high-dose animals was within the historical control limits seen for the strain of mice used. The female mice were given a dose larger than the maximum tolerated dose, as indicated by excessive (30%) weight decrement as compared with concurrent controls and evidence of mild liver injury (transaminase elevations). The occurrence of a marginal finding at high dose only in animals given an excessive and somewhat hepatotoxic dose, with no evidence of a carcinogenic effect in rats, male mice, and female mice (given up to 360 mg/kg/day, about 60 times the human dose), and a negative mutagenicity battery are not considered evidence of a carcinogenic potential for Axid.

Axid was not mutagenic in a battery of tests performed to evaluate its potential genetic toxicity, including bacterial mutation tests, unscheduled DNA synthesis, sister chromatid exchange, mouse lymphoma assay, chromosome aberration tests, and a micronucleus test.

In a 2-generation, perinatal and postnatal fertility study in rats, doses of nizatidine up to 650 mg/kg/day produced no adverse effects on the reproductive performance of parental animals or their progeny.

Pregnancy—Teratogenic Effects—Pregnancy Category C—Oral reproduction studies in rats at doses up to 300 times the human dose and in Dutch Belted rabbits at doses up to 55 times the human dose revealed no evidence of impaired fertility or teratogenic effect; but, at a dose equivalent to 300 times the human dose, treated rabbits had abortions, decreased number of live fetuses, and depressed fetal weights. On intravenous administration to pregnant New Zealand White rabbits, nizatidine at 20 mg/kg produced cardiac enlargement, coarctation of the aortic arch, and cutaneous edema in 1 fetus, and at 50 mg/kg, it produced ventricular anomaly, distended abdomen, spina bifida, hydrocephaly, and enlarged heart in 1 fetus. There are, however, no adequate and well-controlled studies in pregnant women. It is also not known whether nizatidine can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Nizatidine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers—Studies in lactating women have shown that 0.1% of an oral dose is secreted in human milk in proportion to plasma concentrations. Because of growth depression in pups reared by treated lactating rats, a decision should be made whether to discontinue nursing or the drug, taking into account the importance of the drug to the mother.

Pediatric Use—Safety and effectiveness in children have not been established.

Use in Elderly Patients—Healing rates in elderly patients were similar to those in younger age groups as were the rates of adverse events and laboratory test abnormalities. Age alone may not be an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function.

Adverse Reactions: Worldwide, controlled clinical trials included over 6,000 patients given nizatidine in studies of varying durations. Placebo-controlled trials in the United States and Canada included over 2,600 patients given nizatidine and over 1,700 given placebo. Among the adverse events in these placebo-controlled trials, only anemia (0.2% vs 0%) and urticaria (0.5% vs 0.1%) were significantly more common in the nizatidine group. Of the adverse events that occurred at a frequency of 1% or more, there was no statistically significant difference between Axid and placebo in the incidence of any of these events (see package insert for complete information).

A variety of less common events were also reported; it was not possible to determine whether these were caused by nizatidine.

Hepatic—Hepatocellular injury (elevated liver enzyme tests or alkaline phosphatase) possibly or probably related to nizatidine occurred in some patients. In some cases, there was marked elevation (>500 IU/L) in SGOT or SGPT and, in a single instance, SGPT was >2,000 IU/L. The incidence of elevated liver enzymes overall and elevations of up to 3 times the upper limit of normal, however, did not significantly differ from that in placebo patients. All abnormalities were reversible after discontinuation of Axid. Since market introduction, hepatitis and jaundice have been reported. Rare cases of cholestatic or mixed hepatocellular and cholestatic injury with jaundice have been reported with reversal of the abnormalities after discontinuation of Axid.

Cardiovascular—In clinical pharmacology studies, short episodes of asymptomatic ventricular tachycardia occurred in 2 individuals administered Axid and in 3 untreated subjects.

CNS—Rare cases of reversible mental confusion have been reported.

Endocrine—Clinical pharmacology studies and controlled clinical trials showed no evidence of anti-androgenic activity due to nizatidine. Impotence and decreased libido were reported with similar frequency by patients on nizatidine and those on placebo. Gynecomastia has been reported rarely.

Hematologic—Anemia was reported significantly more frequently in nizatidine than in placebo-treated patients. Fatal thrombocytopenia was reported in a patient treated with nizatidine and another H₂-receptor antagonist. This patient had previously experienced thrombocytopenia while taking other drugs. Rare cases of thrombocytopenic purpura have been reported.

Integumentary—Urticaria was reported significantly more frequently in nizatidine- than in placebo-treated patients. Rash and exfoliative dermatitis were also reported.

Hypersensitivity—As with other H₂-receptor antagonists, rare cases of anaphylaxis following nizatidine administration have been reported. Rare episodes of hypersensitivity reactions (eg, bronchospasm, laryngeal edema, rash, and eosinophilia) have been reported.

Other—Hyperuricemia unassociated with gout or nephrolithiasis was reported. Eosinophilia, fever, and nausea related to nizatidine have been reported.

Overdosage: Overdoses of Axid have been reported rarely. If overdosage occurs, activated charcoal, emesis, or lavage should be considered along with clinical monitoring and supportive therapy. The ability of hemodialysis to remove nizatidine from the body has not been conclusively demonstrated; however, due to its large volume of distribution, nizatidine is not expected to be efficiently removed from the body by this method. PV 2093 AMP [101591]

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The Shape of Things to Come

MMA Docs Have Their Say at the Legislature

Minnesota Medicine interviews Roger W. Becklund, M.D.

Physicians have been major players in policy debates in this state, thanks to the commitment of physicians like Roger Becklund, M.D., who chairs the MMA Legislative Committee. Physicians will again have the opportunity to help shape health care in Minnesota when the state Legislature reconvenes February 17. In this month's interview, Dr. Becklund explains the role of the MMA's Legislative Committee and urges physicians to get involved in politics by contributing to campaigns and getting to know their legislators.

State legislators often look to the Minnesota Medical Association for guidance on health care issues. In the last few years alone, the MMA has successfully promoted several health-related initiatives, including a law that gave legal weight to living wills, a plan that established a loan-forgiveness program for physicians in rural areas, and legislation that has increased cigarette taxes to the highest level in the nation.

According to Dr. Becklund, health care access and AIDS testing will be the most important medical issues on this year's legislative agenda. Others will likely include Medicaid reimbursement, workers' compensation reform, and regulation of utilization review firms. Medicaid reimbursements are scheduled to increase July 1, and ensuring that the increases actually take place is an MMA priority.

The Legislative Committee recommends MMA positions on such issues after discussing how they will affect patients and the practice of medicine, says Dr. Becklund. After positions are established by the House of Delegates or the Board of Trustees, MMA lobbyists communicate them to legislators. But in order for lobbying efforts to be successful, physician members must be involved. Not only should members call and write their legislators, but they can also join the lobbying effort—go to the Capitol and testify before committees or discuss issues with legislators in person. Dr. Becklund believes legislators truly listen to physicians' views on health care issues, but first physicians must let their legislators know they have something to say.

Minnesota Medicine: Dr. Becklund, please tell us a little about your background. Where did you go to school, where did you get your surgical training, and how did you end up in Minneapolis?



Roger W. Becklund, M.D.

"If physicians want to be major players in policy debates, they have to get involved."

Becklund: I received my undergraduate degree from St. Olaf College in Northfield, Minnesota, in 1957. I graduated from the University of Chicago School of Medicine in 1961, and I did my internship in surgical residency at Blodgett Hospital in Grand Rapids, Michigan. I then came to Minneapolis and started my own private practice.

Minnesota Medicine: You're not solo any longer, are you?

Becklund: No, I'm not. After about 13 years, another physician joined my practice, and about three years later, we added two more physicians. Our practice now consists of four general surgeons.

MMA's Legislative Committee

Minnesota Medicine: How did you become interested in the Minnesota Medical Association, and how did you eventually become chair of the MMA's Legislative Committee?

Becklund: Before I became involved with the MMA, I was a trustee, president, and chairman of the board of the Hennepin County Medical Society. In 1988, I was asked to serve as a trustee representing HCMS on the MMA Board of Trustees, and I agreed to serve for a short time. As it turns out, I'm still a board member.

I became involved with the Legislative Committee in 1989, when Dr. Paul Sanders—then chairman of the MMA board—asked me to chair the Legislative Committee.

Minnesota Medicine: What is the function of the MMA's Legislative Committee?

Becklund: The committee has several goals, but I think the most important one is to assist the MMA Board of Trustees in developing association policy for health-related matters. The committee reviews all resolutions

from the House of Delegates that deal with legislation and then makes recommendations to the board. It also reviews health care legislation that other groups introduce. The Legislative Committee is usually involved in drafting proposed legislation, which we review again after the staff finishes it. We also disseminate information to the membership on various legislative issues.

Minnesota Medicine: How large is the Legislative Committee?

Becklund: We have about 15 members, which is typical of the MMA's standing committees. We have representatives from all around the state, based on the number of physicians in each district, and we have a broad representation of specialists.

The committee is made up of very dedicated members who take their responsibility seriously. We meet five to seven times per year with activities beginning in November and intensifying from February through May. We also have an outstanding staff that makes sure we have access to all the information we need to make appropriate decisions.

Taking a Stand

Minnesota Medicine: How does the MMA develop positions on specific legislation?

Becklund: The MMA House of Delegates establishes MMA policy, but the house is only in session two days a year, at the MMA's annual meeting. Because medical issues change continuously, the Board of Trustees is empowered to establish policy when the House of Delegates isn't in session.

Many people look at the Legislature and see a slow-moving, inefficient body, but, in reality, things move very quickly at times. That's why we have full-time lobbyists following activities very closely at the Capitol. As issues arise, staff members present them to the committee and recommend appropriate MMA positions. The committee thoroughly discusses the issue and considers how it will affect our patients and the practice of medicine. After discussion, the committee adopts a recommendation, which is sent to the board.

At times, particularly near the end of legislative sessions, when things move very fast, the MMA Executive Committee makes final decisions based on Legislative Committee recommendations.

Reaching Legislators and MMA Members

Minnesota Medicine: Once the MMA Board of Trustees adopts a position, how is it communicated to legislators?

Becklund: First, we disseminate the information to our members, and we hope they will discuss it with their legislators. Then our staff lobbyists meet regularly with the legislators during the legislative session to communicate our positions. Our staff also meets with legislators throughout the year to discuss important issues.

Minnesota Medicine: How do you reach the members?

Becklund: We communicate through the MMA's publications, *Minnesota Medicine* and *The Monitor*. We also send out *Legislative Alerts*. These alerts are crucial to our lobbying efforts. They usually are a "call to action" asking physicians to call or write their legislators about a specific issue. We need a good response from the membership for these alerts to be effective.

The MMA Auxiliary also has been extremely valuable. The auxiliary has set up an effective system for calling on key contacts to write or call their legislators. When we need a message to reach the Legislature, for example, they are ready to respond and have done so many times in the past.

Minnesota Medicine: What's the best way for a physician to respond to a *Legislative Alert*?

Becklund: Letters are best for physicians who don't know the legislators well enough to call them. Even a short note has real impact. Even better is to pick up the phone and talk directly to the person. A call from a physician the legislator knows is far more effective than a call from a stranger. In spite of what we might think, legislators listen to us when it comes to health care issues, especially if the issues don't involve financing.

Minnesota Medicine: Do you testify before House and Senate committees and lobby legislators?

Becklund: I, personally, have not testified. The committee and the MMA lobbyists make sure physicians are available to testify, and we try to call on people who have known expertise in the area of testimony. At times, our lobbyists testify, but whenever possible, we get physicians.

Minnesota Medicine: Do you consider federal, as well as state, issues?

Becklund: Yes, we look at federal issues that involve Minnesota physicians, and our participation in these issues has increased during the last few years. We rely a great deal on the American Medical Association for direct lobbying on federal issues, but we have improved our relations with the Minnesota Congressional Delegation to the point where its members sometimes ask us to take positions on specific federal legislation.

MMA's 1992 Legislative Agenda

Minnesota Medicine: What are the top legislative issues currently affecting health care and Minnesota Medical Association members?

Becklund: The two main things on our agenda this year are health care access and AIDS. A health care access bill was passed and subsequently vetoed last year, and the issue is certainly going to come up again. This was a major piece of legislation that would have directly affected every physician in Minnesota. Because the governor vetoed the bill, the issue will be back in several different forms this year. The governor, the HMO Council, and the Insurance Federation all have their own bills, and there may be an attempt to override the

governor's veto from last year. The MMA plans to be a major player in negotiations for a solution. This is a top priority.

Of equal importance to physicians is the effort to control the spread of AIDS in the health care setting. We know this issue will be considered by the Legislature this session, and we are attempting to develop a response to the outcry for mandatory testing. We want to ensure that any related legislation is responsible to the public and is based on rational, scientific findings.

Minnesota Medicine: Do you think legislators will try to pass mandatory testing laws? The Department of Health and the MMA are urging voluntary testing.

Becklund: I think the issue will be brought up in the Legislature, but I doubt the Legislature will agree to mandatory testing. The thing that worries us is that some politicians might try to appease the public because it's an election year. We are trying to make sure this issue is not decided based on hysteria.

Minnesota Medicine: With elections coming up, do you think it's accurate to assume that every politician running for office will have his or her own version of what ought to be done to improve our health care system?

Becklund: Yes, I think that's true. However, we hope our legislators will do more than merely respond to public pressure and, instead, will act as leaders and try to educate the public. At times, it requires tough and unpopular decisions by legislators. Historically, those legislators willing to make sometimes unpopular decisions have become the great leaders of our society.

MEDPAC's Impact

Minnesota Medicine: Do candidates for office come to you or the MMA to ask about our stance on particular health care issues?

Becklund: In general, politicians are more likely to listen to our views on issues that don't involve the finances of medicine. Candidates for office are usually more interested in MEDPAC, the MMA's political action committee. It's a separate organization that is supported by voluntary contributions from MMA and auxiliary members. As the political arm of the medical association, MEDPAC endorses candidates and contributes money to campaigns. The endorsements are based on each candidate's stance on important health care issues.

Minnesota Medicine: How effective is MEDPAC?

Becklund: It's quite effective. At a minimum, it makes physicians visible through its campaign contributions. MEDPAC doesn't do any actual lobbying. Its work is limited to making campaign contributions to legislators who represent, or at least consider, our viewpoints. It is

one of the largest PACs in the state. In the last election, more than 90 percent of the candidates endorsed by MEDPAC won their elections.

Minnesota Medicine: Would you urge MMA members to join MEDPAC?

Becklund: Definitely. Although MEDPAC is fairly large, less than 10 percent of MMA members join. Therefore, a large number of MMA physicians are benefiting from the financial support of a small number of members. Nobody likes writing checks to political campaigns, but if physicians want to be major players in policy debates, they have to get involved.

There are actually two ways to contribute to campaigns. When you join MEDPAC, your money is distributed to various campaigns, depending on the candidates' positions. You can also make individual campaign contributions to people running for office in your area. Both types of contributions are very effective. We can't buy legislators' votes, and I don't want to give the impression that we can, but by contributing to the campaigns, we get access to the legislators. Giving contributions won't sway legislators' decisions, but it gives us an opportunity to talk to them about the issues.

Minnesota Medicine: How beneficial is MEDPAC to physicians?

Becklund: It's very beneficial, but I believe it's even more important for physicians to get to know their individual legislators. Invite them out for breakfast and talk over the issues, attend their fundraisers, contribute to their campaigns, and volunteer to be on their campaign committees—that's important.

The MMA staff and officers travel to medical societies during the year to discuss legislative issues with members and local legislators. Attending these meetings is a good way to meet your local legislator. This year, MMA President Tom Stolee has taken it upon himself to visit every society in the state, and he's putting forth tremendous effort.

Minnesota Medicine: Many physicians become frustrated with the legislative process and don't understand why we need to be involved. What do you have to say to these physicians?

Becklund: Medicine has undergone many changes over the past 25 years, but can you imagine the chaos we would have if physicians had no input into these changes? In a loose paraphrase of Winston Churchill: "Democracy is far from perfect, but it's the best form of government we have." It's our responsibility as physicians, like it or not, to be involved in the democratic process in order to dedicate ourselves to protecting our patients' best interests.

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Like Horatio, Physician Struggles to Make Sense of Tragedy

Clifton R. Cleaveland, M.D.

The week had been tiring and discouraging—more long-term patients than usual had come to my office with illnesses for which I could do little but empathize and palliate. Aged men and women with declining intellects, emphysemic men slowly fading on continuous oxygen, a young woman with rapidly progressive motor neuron disease—I felt progressively stymied and ineffectual, longing for some more acute situation in which I could work toward a cure.

I sought respite at a weekend showing of the new movie version of "Hamlet." The reviews had been enthusiastic, and I was prepared for a cinematic treat. Thirty minutes passed, and I was really into the film, marveling at the language, the scenery, and the splendid diction of Close and Gibson. Then a door at the rear of the cinema opened, and an usherette cried out that a doctor was needed. Reflexively, I followed her out. As we rushed to the auditorium next door, I asked what was wrong. She said that a man had been shot. I ran down the center aisle to the side of an old man stretched out supine, apparently having had a cardiac arrest. The house lights had not yet been turned up; "Dances With Wolves" played on the screen. Apparently, the old man's collapse into the aisle had coincided with gunfire from the soundtrack. Some of the audience clustered around; others nearby seemed fixed in their seats. Most in the full house were unaware of what had happened. An elderly woman wept in an adjacent seat.

The man was not breathing. He had no pulse. My reflexes took over as I began chest compressions and directed a nurse who had just arrived to begin mouth-to-nose respirations.

"Call 911."

"We have."

Kevin Costner continued on the wide screen behind us, blurring our boundaries of reality. Another nurse arrived and then a family physician acquaintance. The elderly lady, apparently the victim's wife, sobbed, "What will I do, what will I do? We'll have no place to live." I tried to lend comfort as I elicited a fragmentary history from her. Her husband had had a heart attack five years earlier, he took digoxin, and he had been asymptomatic and active.

"Where's the rescue squad?"

"We've called again."

Five compressions and a breath, five compressions and a breath; the house lights slowly came up. His pupils were reactive; the old man began to breathe; he moved his lips.

"Our job is to try to restore order, to allay somehow the grief and hurt of others. But what becomes of the feelings engendered in us?"

Our impromptu team was gaining. A firm carotid pulse at a rate of 30 to 40 was present and then faded. I resumed chest compressions while one of the nurses mopped my forehead and helped to remove my sweaty jacket. The family physician spelled me at the chest, and I checked pupillary responses and femoral pulses, now bounding from the closed chest massage. The old man moved his hands—the last spontaneous movement we were to see.

After 20 minutes, a fireman arrived with a bottle of oxygen, and I took another turn at the chest—five and one, five and one. The numbing

and pounding work of resuscitation continued. Helpful strangers guided the tearful wife away from the circle and tried to console her. From the back door, the theater manager announced that everyone should leave and obtain a ticket refund. Many patrons, however, remained frozen in their seats, staring now at the film's buffalo stampede. Perhaps the movie freed them from the horror that all now perceived in the center aisle.

Finally, the equipment-laden rescue squad arrived, as did a third physician, who placed an IV in the man's left arm. One EMT inserted an endotracheal tube, while another attached the leads of a cardiac monitor. Coarse ventricular fibrillation. We shocked. No response. Bicarbonate and lidocaine were given, followed by a second shock and another. A junctional rhythm appeared briefly before deteriorating into fibrillation. The electrical and chemical ritual of resuscitation continued against a backdrop of increasing hopelessness. Three doctors, three nurses, and a team of EMTs were powerless to do any more in the theater aisle. We eased the old man onto a board, board onto stretcher, and then stretcher into ambulance. The rescue squad assumed control for the several-mile ride to the nearest hospital. I learned later that the death begun in the theater had ended in the emergency room.

Who was the old man? What would become of

the new widow? Who was the retarded adult sitting next to her? A stranger? A kinsman? Why was she worried about losing her home? I knew neither the man nor his wife, yet in the curious way of clinical medicine, a bond of sorts had been struck.

I was weak, sweat-drenched, and utterly wrung out. I wanted to cry. I wanted to know the old man's story. For a brief few minutes our lives had twisted together. I was sharply aware of my own mortality because he lost his life. I felt shaky, decidedly non-professional, and vulnerable. I washed up in the cinema's restroom and composed myself. As I rejoined my wife for what remained of "Hamlet," Mel Gibson delivered the Prince's epiphany to Yorick's skull—words made all the more piercing by the real life just concluded. We viewed the compounded tragedy of the final scene: Gertrude, Claudius, Laetes, Hamlet, all dead. Horatio was left to mourn and to struggle to make sense of the calamities engulfing the survivors.

As physicians we see much. Things go predictably for us most of the time, and then chaos erupts. At such times

we are trained to shift to methodical, automatic counter-measures. Sometimes these prevail. Oftentimes death prevails. Grief erupts and swirls about us. Our job is to try to restore order, to allay somehow the grief and hurt of others. But what becomes of the feelings engendered in us?

The immediate feelings—fatigue, frustration, a sense of aloneness—will wane. Over a longer term we may think that tragedy may broaden our sympathies, but tragedy may also quietly add to our burden of grief, building life charge in an emotional capacitor. Burn-out lurks always, or worse, insensitivity. We try to distance ourselves from the hurt by speaking to colleagues of a failed

code or some intervention gone awry. We retreat behind jargon and understatement. Somehow we put the mask of professionalism back in place. We are ready for another day.

MM

Clifton Cleaveland is with Associates in Internal Medicine, Chattanooga, Tennessee. The essay is reproduced with permission from: Cleaveland CR. "CPR," Ann Intern Med 1991;115:570-1.

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Kevin J. Fullin, M.D., a cardiologist in Kenosha, Wisconsin, recently helped establish a hospital-based program for victims of domestic violence. Now Dr. Fullin has earned a reputation as the doctor who treats battered women. Fullin's colleagues often say to him, "I hear you're working with battered women." And Fullin replies, "So are you." ♦ Fullin's response, as



related by Amanda Cosgrove, coordinator of the Domestic Violence Project at St. Catherine's Hospital in Kenosha, implies that physicians everywhere are treating battered women; many just don't realize it. Thousands of battered women and other victims of domestic violence visit doctors' offices and emergency rooms each year. In most cases, they are treated and sent back to violent homes.

Family Violence Intervention

Physicians Find It's More Than Treating Injuries

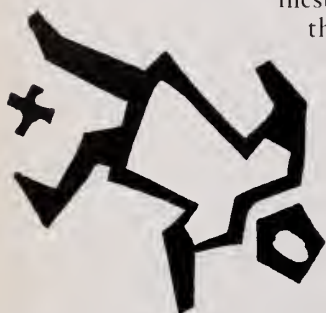
♦ Doctors don't return patients to violent situations because they are callous or indifferent. Physicians simply haven't been taught to recognize or deal with the signs of domestic violence.

"We spend hours and hours in medical school talking about diseases that we probably will never see, and we spend no time learning about [domestic violence], which is extremely pervasive, and the morbidity and mortality is expensive," says David Moen, M.D., who works in the emergency room at Fairview Southdale Hospital and has written about his own experiences treating battered women. "We're not trained to recognize [abuse] in our practices, and if you're not trained to recognize something, you tend not to look for it."



By Miriam K. Feldman

Physicians across the country are about to get a crash course in domestic violence. With the AMA leading the way, physicians will be hearing more and more about the violence that occurs between people who are intimate with one another. Last October, the AMA launched its "Campaign Against Family Violence," with Robert McAfee, M.D., proclaiming, "Domestic violence is an epidemic that threatens the public health. Yet until now, America's physicians have not been educated about this epidemic in any coordinated way."



McAfee, who is vice chair of the AMA's board of trustees, challenged every physician in America to "be aware of the role domestic violence may be playing in your patients' medical complaints."

The AMA's campaign grew out of its Council on Scientific Affairs report on violence against women, although the campaign also covers violence against children and the elderly. (This article focuses on battered women, a problem that until now has received little attention from the medical profession.) The campaign includes a letter to every physician in the country urging each one to learn more about family violence; establishment of the National Medical Resource Center and Clearinghouse for the Prevention of Family Violence; publication of a special issue of *JAMA* devoted to family violence; and creation of a set of guidelines to assist doctors in diagnosing, treating, and, when possible, preventing continuing domestic violence.

Family violence is a medical problem, the AMA asserts, and physicians have an obligation to intervene.

"Health care providers may be the first and only professionals in a position to recognize violence in their patients' lives."

—Susan Hadley, M.P.H.

Although physicians can't stop abuse, they can identify and document it, provide victims with sensitive support, make necessary referrals, and report the abuse when appropriate (see "The Physician's Response to Domestic Violence: Legal Issues," page 35).

The facts on domestic violence, cited by the AMA, are overwhelming:

- From 22 percent to 35 percent of women who visit

emergency rooms have symptoms related to abuse, but as few as 5 percent of the victims are identified as such.

- Between 2 million and 4 million women nationwide, and 63,000 in Minnesota, are physically battered each year by the men in their lives.

- Domestic violence is the single largest cause of injury to women in the United States, more frequent than automobile accidents, muggings, and rapes combined.

- Each year, domestic violence leads to 100,000 days of hospitalization, 30,000 emergency room visits, and 40,000 visits to the physician.

- More than one-third of women murdered in America are killed by husbands or boyfriends.

- At least half the time, if the wife (mother) is being physically abused, so are the children.

- One in five battered women presenting to physicians has sought medical attention for injuries from abuse 11 times previously.

- Children who have been abused and returned home without intervention face a 50 percent chance of further abuse and a 10 percent chance of death resulting from abuse.

- Child homicide is now among the five leading causes of death in childhood, with the majority of infant victims killed by parents, relatives, and other children.

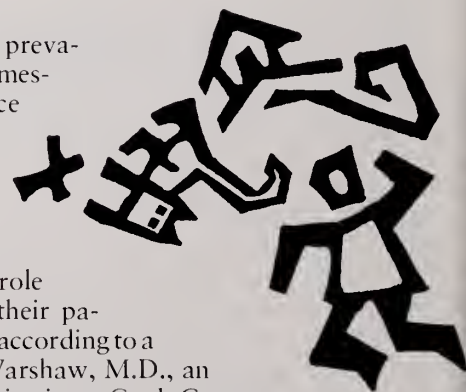
- More than 1 million—4 percent—of older Americans are physically and emotionally abused by their relatives.

Despite the prevalence of domestic violence and the frequency with which victims seek medical care, physicians rarely acknowledge the role violence plays in their patients' complaints, according to a study by Carole Warshaw, M.D., an internist and psychiatrist at Cook County Hospital in Chicago. Physicians probed into the causes of injuries in less than one-third of the cases she studied at Cook County Hospital, and in 92 percent of the cases, the discharge diagnosis did not reflect the presenting symptoms of abuse.

"Even when a woman had clearly been injured by another person, often her spouse, she would rarely be asked any questions that would indicate an awareness on the part of the physician that he or she was interacting with a woman at risk for abuse," Warshaw writes in the journal *Gender & Society*.

Warshaw, a member of the committee that is writing guidelines for the AMA's campaign on family violence, isn't indicting individual physicians, but rather is commenting on a medical system that reinforces detachment and allows the physician to remain emotionally aloof.

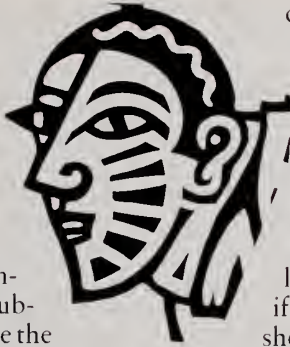
Being a good doctor means "fixing and solving problems, coming up with a diagnosis, and then doing



something about it," Warshaw said in a recent interview. But to treat victims of violence, the physician must delve deeper and look beyond the presenting symptoms. "It really challenges the role of the physician," she said. "The physician needs to help facilitate change, not control it."

Health care workers are in a key position to treat domestic violence, even though the traditional medical model discourages involvement and medical training ignores the subject altogether. "Health care providers may be the first and only professionals in a position to recognize violence in their patients' lives," says Susan Hadley, M.P.H., the founder and director of WomanKind, which provides advocacy for battered women and education for health care professionals at Fairview Southdale Hospital in Edina and Fairview Ridges Hospital in Burnsville. "They are in a position to recognize and provide early intervention, before the violence gets worse. If a woman comes in today and is not recognized, I can almost promise that she will come back in six months and be more severely battered."

Physicians may wonder how they can find time to



deal with domestic violence, particularly if they already feel overworked or believe the issue belongs with the courts, police, or social workers. But experts say it doesn't take much time to address the issue. What's more, acknowledging the problem could help break the cycle of violence that repeatedly sends the victim back for medical care. "The medical profession is ready," says Hadley. "They just don't know what to do. What if they ask a woman if she's been battered and she says yes, then what do they do?"

Warshaw agrees. "It's not very hard if they're prepared to do it. They're afraid if they open it up, it will take forever. 'Uh, oh, now what do I do?' As opposed to, 'I know what to do, and I can take care of it.'"

There are a number of things physicians can do, starting with learning to recognize the signs of abuse. According to Moen, the signs are not much different from the red flags for child abuse: a delay between injury and presentation and injuries to the head, neck, breast, trunk, abdomen, or pelvic areas. "Those things are a tip-off for violent injuries as

Physician, Heal Thyself

Physician, heal thyself. That's the premise of a program developed by the Hennepin County Medical Society in which physicians and nurses at a number of hospitals around the metro area are examining the abuse in their own lives and their attitudes toward domestic violence.

"Physicians and nurses are saying that it is critical to recognize abuse that is present in their training, clinics, hospitals, families, and childhoods as the means of recognizing abuse in patients," according to the medical society.

This is a ground-breaking project, according to Deborah Anderson, president of Respond 2, Inc., and a consultant who is facilitating the projects at North Memorial Medical Center, the nursing department at the University of Minnesota Hospital and Clinic, Riverside Medical Center, Fairview Southdale Hospital, Unity and Mercy Hospitals, Park Nicollet Medical Center, and the Hennepin County Medical Society Auxiliary.

"It's very hard for physicians to identify abuse unless they can see it in themselves. If they can recognize it in each other, they will immediately know what to do with patients," says Anderson, who calls this "a major new role for physician leadership." Physicians, she says, are acknowledging abuse as a "we" problem and asking, "How would we want to be treated?" They are asking how to recognize abuse, what barriers keep them from identifying it, and what

their role is in defining new kinds of interventions.

Research has shown that abuse, particularly verbal abuse, is common in hospitals and affects patient care, staff productivity, morale, and turnover. Merle S. Mark, M.D., of North Memorial Medical Center, said in the March/April 1991 HCMS *Bulletin*, that there is also a need to address conflict, abuse, and neglect in health care families. "Medical marriages are fraught with stresses and strains on spouses and children above and beyond the norm in many professional families," he says.

Allen Kuperman, M.D., chairs a committee at North Memorial Medical Center that is examining conflict, abuse, and neglect in health care families. "Most of us are familiar with signs and symptoms of more overt family violence, child abuse, and so on," says Kuperman, a pediatrician. "Hopefully, as [physicians] come to grips with some of the developmental antecedents—the experiences that put a person at risk—they will begin to recognize signs in patients at much earlier stages," he says. "I think certainly a physician who fails to recognize this in himself puts a blind eye to it and may do the same to his patients."

The medical society project is important, says Susan Hadley, founder and director of WomanKind, Inc., a hospital-based advocacy program for battered women. "We can't identify in someone else what we haven't begun to look at in ourselves."

MKF

For more information...

The AMA's message is loud and clear: Physicians everywhere should consider the role domestic violence plays in their patients' medical complaints. This is new territory for most physicians, and dealing appropriately with victims of violence is going to take some education.

Physicians should keep an open mind and try to learn as much about the problem as they can, says David Moen, M.D., an emergency physician at Fairview Southdale Hospital in Edina. "There's going to be a lot published, and I would encourage physicians to educate themselves as much as they can about the problem."

There are numerous resources available to help physicians learn more about the problem of domestic violence. Here are just a few:

- Minnesota Coalition for Battered Women. This organization can provide a directory of all the shelters and intervention projects in the state. For more information, call 612/646-6177. The coalition also has a

24-hour crisis number, 612/646-0994.

- "Empowering Battered Women: Suggestions for Health Care Providers," discusses the cycle of violence, indicators of battering, and what to do when a victim is identified. This 50-page booklet costs \$12, plus \$2.50 for postage. Write: Massachusetts Coalition of Battered Women Service Groups, 107 South Street, Fifth Floor, Boston, MA 02111. Or call 617/426-8492.

- Susan M. Hadley, M.P.H., the founder and director of WomanKind, Inc., gives one-to-three-hour seminars and presentations on domestic violence, the role of the nurse and allied health care professional in treating abuse, and how to work with battered women in the health care system. For more information, call 612/924-5775.

- The AMA is establishing a National Medical Resource Center and Clearinghouse for the Prevention of Family Violence. For more information, call 312/464-5000.

MKF

opposed to accidental injuries," he said.

Often, however, victims of domestic violence present with symptoms that aren't obvious. "They tend to come in with vague complaints—headaches, anxiety, depression," says Moen. Injuries often are dismissed by explanations like, "I hit my head on the door," or "I fell down the stairs."

Even if a patient tries to conceal the cause of injury, she really wants the truth to be known, Hadley says. "When a woman reaches out to the medical system, she wants to be asked. If it's not brought up, she feels more shame because she thinks it's not important to talk about it."

As Warshaw puts it: "If you ask the right question, women will tell you." But what is the right question? What do you say to a patient you suspect has been abused? There are certain rules that always apply, the experts say. First, never ask the woman about her situation unless she is alone. She is not free to talk if her abuser is present, and he frequently is. Second, be nonjudgmental; never blame the woman for what happened to her.

Amazing as it sounds, victims frequently are blamed for their injuries. Hadley tells about one physician whose response to a woman's nasal fracture was: "What did she do that made him hit her? What caused him to do that?"

Whatever happened, it wasn't her fault, says Hadley. And that's exactly what she says to battered women: "No one deserves to be hit. Not for any reason. You don't deserve to be abused."

If a physician suspects that a woman has been beaten, Hadley says it is appropriate to say something like, "I notice you have a number of bruises. Did someone hit you? Could you tell me how it happened?"

Moen takes a similar approach and tells patients, "This injury looks like it may have been caused by someone hitting you, and that concerns me. I just want you to know that this is a safe place to come if you feel threatened and in danger again."

In cases where the abuse isn't obvious, where the woman presents with psychosomatic symptoms, anxiety, or depression, it's appropriate, says Hadley, for the physician to say: "What is going on in your life that seems overwhelming right now?"

Learning to say the right thing is just part of what physicians can do to help victims of violence. They also should carefully document what they have observed, says Denise Eng, a legal advocate for the Harriet Tubman Women's Shelter in Minneapolis. Physicians should photograph visible injuries, if possible, or else indicate on the patient's record the precise nature and location of the injury and any information about how the injury was received. This is very important, especially if the woman decides to press charges, says Eng.

Even when physicians acknowledge the violence and ask the "right" questions, the woman is likely to return to the abusive situation. Yet the AMA reports that simply identifying the abuse is the most important intervention a physician can make because that alone can empower

the victim to begin the process to free herself. If she does go back, it's only testimony to how difficult it is to break away, says Eng. "If you see a woman several times, it's not testimony to her weakness, it's how badly [her abuser] is trying to hang onto her and how much control he's exercising over her."

It took Moen a long time to learn that lesson, as he explained in an article for *Mpls. St. Paul* magazine about his own experiences treating battered women. Moen wrote about his inability to empathize with battered women, particularly those who made repeated visits to the emergency room, and how he blamed them for not dealing with their problems. "In this, I believe, I was like most doctors. Untrained to recognize the signs of domestic violence and to deal with the emotions it generates, we become impatient with its victims," he wrote.

In a recent interview, Moen said he became more compassionate once he learned more about the cycle that traps women and the reasons why they hide the problem. Moen also knows that he can't really solve his patients' problems. "We'll all be very frustrated if we think we'll solve the problem for the victim. You can't solve the problem, but you can let the victim know that people have gotten out of these situations and that people don't deserve to be treated violently in their homes."

Programs like WomanKind and Dr. Fullin's program in Kenosha make it easier for physicians to treat victims of violence. Hadley founded WomanKind in 1986 after realizing that the medical system was doing almost nothing for battered women, even though it was often the first place they turned for help. Since then, the program has assisted more than 4,000 clients.

WomanKind, a model program that has recently received national recognition through both *JAMA* and the "Today Show," provides advocates to work with battered women and teaches health care workers about the dynamics and myths of domestic violence and about ways to identify battered women. WomanKind provides the kind of back-up that makes a physician's job a lot easier. "I think of a team approach," Hadley says. "I don't think any one person can do all that patient care. It may take a physician, nurse, social service, or an advocacy program. They [physicians] have to provide a supportive environment, and they have to ask the right questions. But once [the victim] is identified, you call in other members of the team."

Unfortunately, most physicians don't have a program like WomanKind to call on. If a program doesn't exist at your hospital, organize one, Warshaw suggests. Even without a formal back-up system, physicians still can make a difference, she says. "Even a little bit does help. Letting the patient know that you're concerned, that she doesn't deserve to be beaten, does make a difference."

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Miriam Feldman is a free-lance writer living in Minneapolis and is a frequent contributor to *Minnesota Medicine*.

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2. Guttormson NL, Bubrick MP. Mortality from ischemic colitis. *Dis Colon & Rectum*, to be published.
3. Chatterjee SN. Use of GOR-TEX grafts as vascular access procedure for chronic hemodialysis. Abstract of a paper submitted to the European Society for Artificial Organs Eighth Annual Meeting, Copenhagen, August, 1981.
4. Thompson NW. Thyroid and parathyroid. In: Welch KJ, Randolph JG, Ravitch MM, et al., eds. *Pediatric Surgery*, 4th ed. Chicago: Year Book Medical, 1986; vol 1, 522-33.

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The Child at Risk for Developing Heart Disease

Third of Three Parts

Albert P. Rocchini, M.D., and Mary Ella Pierpont, M.D.

ABSTRACT

We discuss how to identify the child at risk for developing or having heart disease. We describe both the child at risk for developing adult-onset heart disease and the child or fetus at risk for having congenital heart disease. With respect to the child at risk for developing adult-onset heart disease, we concentrate on how four risk factors (cigarette smoking, hyperlipidemia, reduced physical activity, and obesity) affect the development of cardiovascular disease, and we review the types of therapy currently being used to modify them. We also discuss the etiological factors related to the risk of developing congenital heart disease, such as single-gene conditions, known cardiac teratogens, chromosomal anomalies, and multifactorial inheritance.

This is the final article in a three-part series on cardiovascular disease in children. The first two articles in the series focused on the management of children with congenital heart disease.^{1,2} This article describes how to identify both the child at risk for developing adult-onset-type heart disease (i.e., atherosclerotic heart disease) and the child or fetus at risk for having congenital heart disease.

Atherosclerotic Heart Disease Risk

Coronary artery disease has its origin in childhood. Epidemiological and clinical studies in adults with coronary heart disease have made it possible to develop a list of risk factors that help identify individuals susceptible to coronary heart disease. Those factors are increased cholesterol levels in the blood, elevated blood pressure, cigarette smoking, obesity, and poor physical fitness. This article concentrates on the types of therapy currently being used to treat coronary heart disease and describes how four risk factors (cigarette smoking, hyperlipidemia, reduced physical activity, and obesity) promote the development of cardiovascular disease.

Smoking

Cigarette smoking is an avoidable cardiovascular risk factor. Since 1964, more than 30 million Americans have stopped cigarette smoking, yet its prevalence has not decreased among adolescents, who represent the largest group of individuals at risk for starting to smoke. Smoking directly increases cardiovascular risk by altering blood pressure regulation, increasing total serum cholesterol, and decreasing HDL-cholesterol levels.

The most effective way to treat smoking is through prevention. Since smoking rates are highest among adolescents, prevention is most critical in this group. School-based prevention programs, beginning in grade six and with booster sessions through secondary school, can significantly reduce adolescent smoking.

Hyperlipidemia

Hyperlipidemia is a significant risk factor for the development of adult-onset heart disease. To understand abnormalities of lipid metabolism and their treatment, it is important to understand how the body handles cholesterol.

Cholesterol from dietary fat is digested, absorbed, and reprocessed in the liver. The liver secretes the reprocessed cholesterol into either the intestines as bile or into the blood stream in combination with triglycerides as very-low-density lipoprotein (VLDL) particles. In plasma, the VLDL particles are converted to low-density lipoproteins (LDL), which can then be taken by the cells and reconverted back into cholesterol. The LDL particles are guided by apoproteins (lipoprotein surface proteins) to the LDL receptor sites on the cell. The number of LDL receptors and their affinity for apoproteins determines the level of cholesterol in the blood.

Intracellular cholesterol that the cells do not use or store is passed out of the cell and combined with recycled LDL particles to form HDL particles. The liver eventually removes these HDL particles from circulation. Excess cholesterol is primarily removed from cells through the formation of HDL-cholesterol.

Abnormalities in the way cells handle LDL-receptor formation causes familial hypercholesterolemia,

Table 1

Genetic forms of hyperlipidemia

Disorder	Phenotypes	Mode of inheritance
Exogenous hypertriglyceridemia	Type I	Autosomal recessive
Familial hypercholesterolemia	Type IIA,IIB	Autosomal dominant
Familial hypertriglyceridemia	Type IV,V	Autosomal dominant
Familial combined hyperlipidemia	Types IIA,IIB,IV,V	Autosomal dominant
Polygenic hypercholesterolemia	Types IIA,IIB	Polygenic
Sporadic hypertriglyceridemia	Types IV,V	Non-genetic
Broad β disease (dysbetalipoproteinemia)	Types III,IV	Autosomal dominant

Phenotypes: Type I=Inc chylomicrons, Type IIA=Inc LDL, Type IIB=Inc LDL and VLDL, Type III=abnormal lipoprotein, Type IV=Inc VLDL, Type V=Inc chylomicrons and VLDL.

a common genetic form of hyperlipidemia. In this disease, either the number or function of LDL receptors is altered, leading to a reduced binding of LDL-cholesterol to the receptors, a higher serum LDL-cholesterol concentration, a higher plasma cholesterol, and atherogenesis. Table 1 summarizes the various known genetic forms of hyperlipidemia.

Historical information is of prime importance for determining which children should be screened for hyperlipidemia. Children with a family (parent or grandparent) history of premature atherosclerotic disease, defined as the appearance of clinical manifestations of atherosclerosis before age 50 for men and age 60 for women, are at clear risk and should be screened. Several other historical features also suggest hyperlipidemia, such as recurrent, unexplained pancreatitis or abdominal pain; a history of abnormal glucose tolerance, hyperuricemia, or xanthoma; disease of the thyroid, liver, or kidneys; or diabetes. Lipid screening is recommended only if a child has a history compatible with hyperlipidemia.

Hyperlipidemia is diagnosed by measuring the plasma levels of lipoproteins. Ideally, a blood sample should be drawn after a 12- to 14-

hour fast. To be interpreted, the plasma values must be compared with normal values. As with most clinical laboratory tests, normals are based on a statistical distribution of values in the general population. Traditionally, values greater than the 90th percentile cutoff have been employed for defining abnormal cholesterol and triglycerides.

The cornerstone of lipid management is diet. Both the saturated fat content and the cholesterol content of the diet must be reduced to maintain maximum dietary benefit. Saturated fat appears to increase the synthesis of LDL-cholesterol and decrease LDL-cholesterol disposal. Polyunsaturated fat decreases VLDL-triglyceride, cholesterol, and apoprotein-B synthesis. Monounsaturated fat, such as olive oil and peanut oil, are especially beneficial because they not only reduce LDL-cholesterol but also reduce the LDL-cholesterol/HDL cholesterol ratio. High-fiber foods, such as oat bran, beans, and other water-soluble fibers, can also lower cholesterol.

Dietary management alone can reduce cholesterol levels by 5% to 20%. The American Heart Association phase-I diet recommends the intake of 30% of calories as fat, 55%

as carbohydrates, and 15% as protein. The fat should be approximately equally divided between polyunsaturated, monounsaturated, and saturated fats. The major source of carbohydrates should be complex carbohydrates, and cholesterol intake should be below 300 mg/day.

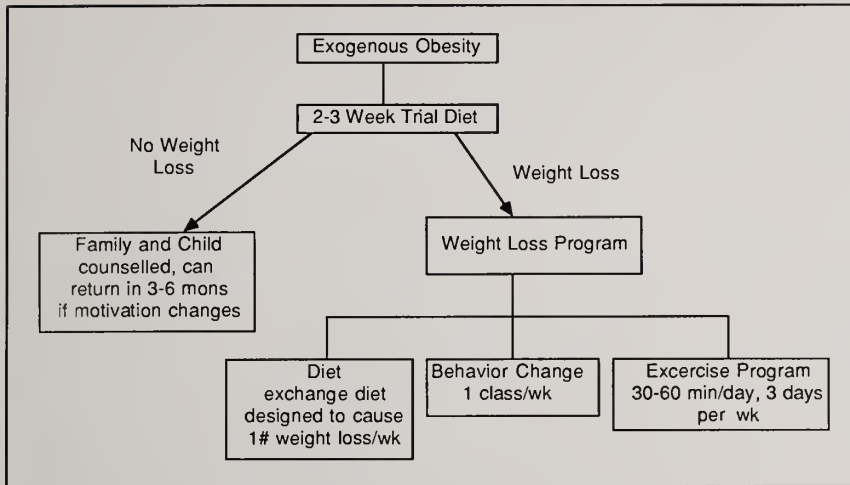
Other than diet, the non-pharmacological forms of therapy for hyperlipidemia are weight reduction and exercise. The goal of diet therapy should be to reduce total cholesterol below 200 mg% and LDL-cholesterol below 120 mg%, while maintaining HDL-cholesterol greater than 40 mg%. Most pediatric lipid specialists do not recommend lipid-lowering drugs unless dietary means are unable to reduce total cholesterol to a level below 250 mg% and LDL-cholesterol below 175 mg%.

It is important to remember that although there is growing evidence that treating hyperlipidemia in adults can reduce coronary mortality and lead to a regression of atherosclerotic lesions, little or no data are available on the efficacy of managing children's cholesterol levels to prevent atherosclerosis in adulthood.

Physical exercise

Exercise levels directly correlate with HDL-cholesterol levels and inversely with cholesterol and triglyceride levels and obesity.

For children, 30 to 60 minutes of exercise four times per week is sufficient to maintain cardiovascular fitness. The exercise must be individualized—it must consider the type of exercise the child most enjoys and the facilities and equipment available. Not all types of exercise benefit cardiovascular fitness equally. Activities requiring effort against heavy resistance, such as weightlifting, can increase the efficiency of certain muscle groups, but do little to improve cardiovascular fitness. Aerobic exercise is necessary to achieve sufficient cardiovascular conditioning. Any activity that can be maintained continuously, is rhythmical, and uses large groups of muscles is aerobic. Activities such as vigorous walking, jogging, skating, skiing, aerobic dance, and bicycling are recommended. Despite the reported ben-



FIGURE—Outline of a pediatric weight-loss program.

efits of regular aerobic exercise, the drop-out rate among those beginning regular exercise is high, and support from family and friends is critical to maintain compliance.

Obesity

We have documented that 97% of obese adolescents have four or more of the following risk factors: elevated serum triglyceride levels, decreased HDL-cholesterol levels, increased total cholesterol levels, elevated systolic and/or diastolic blood pressures, diminished maximum work capacities, and strong family histories of coronary heart disease. Obesity is defined as an accumulation of body fat greater than 22% of total body weight for men and greater than 30% of total body weight for women. Weight-for-height standards are also useful in defining obesity. A commonly accepted definition for childhood obesity is the combination of triceps and subscapular skinfolds greater than the 80th percentile and weight for height greater than the 75th percentile for age and sex. By these criteria, 15% to 20% of all U.S. school-age children are obese.

Appropriate treatment for obese children and adolescents can be categorized into one of a combination of six basic approaches: caloric restriction, anorectic drugs, increased physical activity, therapeutic starvation, bypass surgery, and habit-pattern changes based on social-learning therapy.

A practical weight-loss program is outlined in the figure. In order to assess a child's ability to comply with a weight-loss program, we believe the child should be placed on a trial diet for two to three weeks. Only if the child is successful with the trial diet—loses at least one to two pounds in two to three weeks—is he or she likely to benefit from the program.

The weight-loss program should consist of diet, behavior change, and exercise. For a child to lose one to two pounds per week, his or her caloric intake must be reduced by 500 to 1,000 calories per day. Adolescent weight-reduction diets should not go below 1,200 calories per day to ensure the child is getting adequate vitamins and nutrients for normal growth and development. We recommend an exchanged-type diet because it teaches the essentials of good nutrition and actively involves the child in determining his or her own diet. The behavior-change component of our program includes a one-hour weekly class for 20 weeks, then classes every other week until the child has maintained his or her goal weight for at least one month. The classes should emphasize 1) nutrition education, 2) record keeping, 3) stimulus control for restricting the external cues that set the occasion for eating, and 4) reinforcement of alternative behavior. The weight-loss program should have a built-in reinforcement system to help the child establish and maintain new habits.

In addition to the child's structured portion of the program, family support is critical. The child's family needs to be taught how to give the child positive support without nagging or taking over the child's weight-loss program. It is important to remember that if the child does not want to lose weight, no weight-loss program, regardless of its approach or cost, will be successful.

Congenital Heart Disease Risk

Congenital heart malformations occur at a rate of eight per 1,000 live births. In Minnesota, since there are approximately 60,000 births per year, the expected incidence of congenital heart disease is about 500 children per year. An identifiable cause can be established in only 15% to 18% of these children. Some of the etiologic factors relating to congenital heart malformations are listed in Table 2.

Single-gene conditions

A large number of identifiable syndromes or conditions are associated with congenital heart malformations.

In the **Holt-Oram syndrome**, skeletal anomalies of the upper limbs (radius and thumb) are associated with cardiac malformations, including secundum atrial septal defect and ventricular septal defect.

The **Ellis-Van Creveld syndrome**, a rare autosomal-recessive condition also called chondroectodermal dysplasia, is most commonly found among inbred populations, such as the Amish. Individuals with this syndrome have short-limbed dwarfism,

Table 2

Etiologic factors & congenital heart malformations

Cause	%
Single Mendelian gene conditions	3-5
Known cardiac teratogens	1-3
Chromosome anomalies	8-10
Multifactorial inheritance	82-88

Table 3

Known cardiac teratogens

	Cardiac malformations*	Estimate of frequency (%)
Infection		
Rubella	PDA, PS, ASD	25-35
Drugs		
Alcohol	VSD, ASD, PDA	20-40
Lithium	Ebstein anomaly, ASD	2-5
Amphetamines	VSD, PDA, TGA	10
Thalidomide	TF, VSD, ASD	5-10
Isotretinoin	Complex, VSD	50
Maternal Disease		
Diabetes	VSD, TGA, AS	3-5
Phenylketonuria	TF, VSD, ASD	15-20

*AS=aortic stenosis, ASD=atrial septal defect, PDA=patent ductus arteriosus, PS=pulmonary stenosis, TF=tetralogy of Fallot, TGA=transposition of great vessels, VSD=ventricular septal defect.

malformed teeth, accessory frenula, hypotrichosis, and fine-textured hair. Heart abnormalities include defects of the atrial septum, ventricular septum, AV canal, and single atrium.

In the autosomal-dominant Noonan syndrome (also known as the male Turner syndrome or Turner phenotype with normal karyotype), short stature, ocular hypertelorism, triangular facies, ptosis, and webbing of the neck can be associated with congenital heart malformations. Nearly half of all individuals with Noonan syndrome have some type of cardiac anomaly, most commonly pulmonary valvular stenosis.

LEOPARD syndrome is an autosomal-dominant condition that resembles Noonan syndrome. LEOPARD is an acronym for the syndrome's common features: lentigines, electrocardiographic abnormalities, ocular hypertelorism, pulmonary stenosis, abnormal genitalia, retardation of growth, and deafness. Lentigines, small dark brown spots distributed primarily over the trunk, can be present at birth or can develop as the child gets older. Cardiovascular abnormalities, including pulmonary valvular stenosis and hypertrophic cardiomyopathy, are quite common in LEOPARD syndrome.

Supravalvular aortic stenosis occurs in two distinct forms. In one, it is inherited in families as an autosomal-

dominant condition. These individuals have cardiovascular malformations, including narrowing of the supravalvular aortic region, that can be associated with peripheral pulmonary artery stenosis. The second form of supravalvular aortic stenosis occurs in individuals with Williams elfin facies syndrome, for which the inheritance pattern is unknown.

Thrombocytopenia absent radius syndrome is associated with bilateral abnormalities of the radius. Cardiac malformations, most commonly tetralogy of Fallot, ventricular septal defect, and atrial septal defect, occur in 20% to 25% of individuals with the syndrome. This autosomal-recessive condition has a 25% risk of recurrence in subsequent children.

Known cardiac teratogens

Table 3 lists some of the environmental agents that can contribute to abnormal cardiovascular development. The influence of a cardiac teratogen on cardiac development is dependent on the genetic predisposition of each individual and the timing of the exposure during a vulnerable period of cardiac development. Thus, many environmental agents that have no importance to the population in general have a profound effect on individual families or groups with a specific genetic predisposition. Embryologic studies suggest that formation of the heart and major blood vessels is complete by 60 days after conception; therefore, the vulnerable period for cardiac teratogenesis is from 18 to 60 days after conception.

Prenatal rubella infection is responsible for a number of fetal abnormalities, including microcephaly, psychomotor retardation, cataracts, deafness, and congenital heart malformations. The most common congenital heart malformations include patent ductus arteriosus and peripheral pulmonary artery stenosis.

Alcohol is the most widely used drug known to be a teratogen. Infants with full fetal alcohol syndrome may have the following symptoms: microcephaly, growth and developmental retardation, hyperactivity, facial anomalies, and cardiac anomalies. In fact, cardiac anomalies are present in up to 40% of infants who have full fetal alcohol syndrome. They include ventricular septal defect, patent ductus arteriosus, and atrial septal defect. The risk of damage in the children of a chronic alcoholic mother is as high as 50%, and subtle signs of fetal alcohol syndrome also may be present in the offspring of women who are social drinkers. The incidence of full fetal alcohol syndrome is estimated to be one or two per 1,000 births.

A high incidence of the rare cardiac malformation Ebstein anomaly has been reported in the offspring of mothers taking lithium, and amphetamines also have been implicated in the etiology of some congenital heart anomalies. Recent data suggest as much as a 10.9% risk of cardiac malformation following maternal amphetamine exposure. The drug thalidomide, which is no longer available for use, is also a potent teratogen. Studies indicate that fetal abnormalities, including central nervous system, thymus, craniofacial, and cardiac anomalies, occur in a high proportion of infants with prenatal exposure to isotretinoin (Accutane), which has been used in recent years to treat severe cystic acne. Conotruncal cardiac abnormalities, as well as ventricular septal defect and pulmonary stenosis, are common.

Finally, maternal diseases such as

diabetes and phenylketonuria are associated with an increased incidence of congenital heart malformations.

Chromosome anomalies

Approximately 8% to 10% of newborns with cardiac malformations have chromosome abnormalities. In the more commonly occurring chromosome anomalies (Table 4), the type and occurrence of cardiac malformations are well established.

The most common chromosome abnormality is **Trisomy 21** (Down's syndrome), which occurs at a rate of one in 660 births. Cardiac malformations occur in nearly 50% of these children, the most common being endocardial cushion defect, ventricular septal defect, or atrial septal defect. All children with Down's syndrome should undergo cardiac evaluation as young infants to assess their medical condition and provide for timely cardiovascular follow-up.

Trisomy 18 occurs in one of 3,500 births and can lead to early death. Cardiac anomalies occur in more than 99% of infants with trisomy 18, with the most common malformations being ventricular septal defect, patent ductus arteriosus, and pulmonary stenosis.

Trisomy 13 occurs in one of 7,000 births. Cardiac malformations are present in 90% of infants with trisomy 13, the most common anomalies being ventricular septal defect and patent ductus arteriosus.

Monosomy X (Turner) syndrome occurs in one of 2,500 females. Cardiac abnormalities occur in one-third of girls with Turner's syndrome, with coarctation of the aorta being the most common cardiac malformation.

The rare cytogenetic abnormalities **4p-** and **5p-** occur in fewer than one of 50,000 births. Infants with 4p- are profoundly retarded and have microcephaly, wide nose, and cleft lip and palate. Survival varies. Cardiac malformations, including atrial septal defect, ventricular septal defect, and patent ductus arteriosus, are present in 40% of these infants. In 5p-, or cri-du-chat syndrome, survival is typically longer than 30 years. A cat cry is characteristic in infancy, and the child has microcephaly, moon facies,

Table 4

Cardiac malformations in chromosome disorders

Condition	Occurrence (Percent)	Usual cardiac malformations*
Trisomy 21	50	ECD, VSD, ASD
Trisomy 18	99	VSD, PDA, PS
Trisomy 13	90+	VSD, PDA
4 p-	40	ASD, VSD, PDA
5 p- (cri-du-chat)	20	VSD, PDA, ASD
45, XO (Turner)	20	CA, AS, VSD

* AS=aortic stenosis, ASD=atrial septal defect, CA=coarctation of the aorta, ECD=endocardial cushion defect, PDA=patent ductus arteriosus, PS=pulmonary stenosis, VSD=ventricular septal defect.

and, occasionally, renal abnormalities. Cardiac malformations are present in 20% of these infants and include ventricular septal defect, patent ductus arteriosus, and atrial septal defect.

Many less common chromosome abnormalities are associated with congenital cardiac malformations. Therefore, evaluation of children with chromosomal abnormalities should routinely include cardiovascular assessment. Other chromosome abnormalities that are known to have significant incidences of congenital heart malformations include trisomy 8, trisomy 9, 13q-, trisomy 22, and partial trisomy 22.

Multifactorial inheritance

By far, however, most congenital cardiac malformations in children have no known etiology. It was suggested in the 1960s that multifactorial inheritance would best explain the genetic basis for most cardiac malformations with unknown etiology. In this type of inheritance, which may account for 82% to 88% of cardiac malformations, the individual's genetic predisposition interacts with the environment or an environmental agent to produce the cardiac anomaly. With multifactorial inheritance, the risk of recurrence is higher for more closely related individuals. The risk of recurrence decreases as

the relationship becomes more remote. The offspring of mothers and fathers with congenital heart malformations are also at increased risk for cardiac malformation. These risks range from 12.3% in the offspring of a mother with atrial septal defect to 2% in the offspring of a father with pulmonary stenosis. The recurrence risks justify careful search for cardiac anomalies in the brothers and sisters of affected children as well as in the offspring of affected parents. When parents have cardiac malformations or have children with cardiac malformations, fetal echocardiography should be employed when the mother is pregnant.

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REFERENCES

1. Moller JH, Kaplan EL. Forty years of cardiac disease in children: progress and problems—first of three parts. *Minn Med* 1991;74(9):27-33.
2. Dunnigan A, Bass J, Braunlin E, Krabill K, Rocchini AP. Diagnostic and therapeutic advances in pediatric cardiology—second of three parts. *Minn Med* 1991;74(12):27-32.

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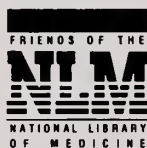
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Lasers in Dermatology

A Review

Charles H. Dicken, M.D.

ABSTRACT

The use of lasers in dermatology has become widespread over the past decade. This article reviews the types of lasers in current use and the skin problems that could benefit from their use.

Lasers (light amplification by stimulated emission of radiation) have proved extremely useful for treating a wide range of skin problems. Dermatologist Leon Goldman, M.D., established one of the first laser laboratories at the University of Cincinnati in 1961, and he used the skin as a model for laser-tissue interaction in many clinical and experimental studies.

The laser is a very bright light with three primary characteristics. It is monochromatic, meaning one color; collimated, meaning the light does not diverge as does a flashlight beam; and coherent, meaning that the wave forms are spatially and temporally coherent—the peaks and troughs occur in parallel.

The ability to produce a spatially coherent, single-wavelength, intense beam of laser light has made it possible to produce tissue effects that were previously impossible. Several lasers with different wavelengths are currently used in dermatology¹⁻⁸ (Table 1).

Argon Laser

The argon laser is blue-green light at 476 to 514 wavelengths. Its relatively select destruction of hemoglobin and melanin chromophores has made the argon laser useful in treating vascular lesions, especially port-wine stains and telangiectasias and some lesions that contain melanin (Table 2).

The argon laser was the treatment of choice for port-wine stains until the more recent development of yellow-dye lasers. The argon laser is still useful, especially for telangiectasias and for dark purple port-wine stains with nodules. However, the risk of scar and pigment loss in younger patients is higher with the argon laser than the yellow-dye laser.⁹

Yellow-Dye Lasers

The yellow-dye laser is also referred to as tunable because the wavelength can be varied. The wavelengths chosen to treat cutaneous blood vessels are in the 580 nm range. These wavelengths coincide with the absorption band of oxyhemoglobin that is farthest from the melanin absorption range. This decreases the risk of pigmentation loss and also increases cutaneous penetration. It is important to limit the laser emission of each pulse so that only the blood vessels will be damaged. The flashlamp-pumped laser has the shortest pulse duration of the yellow-dye lasers. It is capable of delivering a 500-MS range pulse duration and, thus, limits damage to blood vessels. This process is referred to as selective photothermolysis—the selective conversion of light to heat.

The flashlamp-pumped yellow-dye laser with short-pulse duration has made treatment of vascular lesions possible—especially port-wine stains—in young children with a very low occurrence of skin texture changes or undesired pigmentary changes¹⁰⁻¹⁴ (Table 2). The mild pain that occurs when the laser hits skin makes anesthesia necessary in children, but adults usually tolerate the pain without anesthesia. Postoperative care is minimal, but purpura is present and takes several days to resolve.

Two other types of yellow-dye lasers are available: the copper vapor¹⁵ and the argon laser-pumped yellow-dye laser.¹ These two lasers have the advantage of variable spot size and can be used to treat various vascular lesions. They also can be used for photodynamic therapy, which is the use of laser light irradiation and photosensitizers to treat disease processes such as cutaneous malignancies.

Table 1

Types of lasers used in dermatology

	Wavelength (nm)	Use
Ruby	694	Tattoos Pigmented lesions
Argon	476-514	Vascular Pigmented lesions
Argon-pumped yellow dye	577-638	Vascular Photodynamic therapy Pigmented lesions
Copper vapor	510 (green) 578 (yellow)	Pigmented lesions Vascular
Flashlamp-pumped	577	Vascular
Pulsed dye	585	
Carbon dioxide	10,600	Superficial vaporization Bloodless incisions
Nd:YAG	1064	Photocoagulation Bloodless incisions
Excimer	193, 248, 308, 500	Cutting
Helium-neon	632	Aiming beam Wound healing

Carbon Dioxide Laser

The carbon dioxide laser is the most frequently used laser.^{1,4,6} It can be used to destroy tissue in two distinct ways by changing the focus, which allows for tremendous clinical versatility. While the beam is defocused, it vaporizes superficial lesions; while focused, it can bloodlessly excise most tissue (Table 3).

Energy is emitted from the CO₂ laser in the infrared invisible range of 10,600 nm. Its principal tissue chromophore is water. Skin is 80% water, and the laser beam can be absorbed with minimal thermal scattering, limiting the thermal damage to 600 nm or less in the cutting mode.

Advances in technology have decreased the cost and size of the CO₂ laser, and before too long, fiber-optics delivery should become

practical. Table 3 indicates the wide potential use for CO₂ lasers, but, as Dr. Leon Goldman said many years ago, "If you don't need the laser, don't use it."

Nd:YAG Laser

The Neodymium: Yttrium-Aluminum-Garnet (Nd:YAG) laser is in the infrared 1,064 nm range and has been of limited use for cutaneous lesions, but new changes that couple different synthetic sapphire tips with fiberoptic delivery permit this laser to be used similarly to the carbon dioxide laser to provide bloodless incisions.⁸

Ruby Laser

The ruby laser was the first one Goldman used on the skin, but it has only recently been approved for treat-

Table 2

Vascular lesions treated with the argon or yellow-dye lasers

Port-wine hemangioma
Telangiectasia
Red nose
Venous lakes
Spider angiomas
Cherry angiomas
Angiofibromas
Other lesions with vascular component

Table 3

Skin lesions treated with carbon dioxide laser vaporization and laser excision

Carbon dioxide laser	Laser excision
Rhinophyma	Keloids
Actinic cheilitis	Skin cancer
Recalcitrant warts	Tumor excisions
Tattoos	
Various skin tumors	

ment of tattoos. The technique, known as Q-switching, uses red light with a wavelength of 694 nm emitted as extremely high-energy pulses of 40 to 80 nanoseconds in duration. Pigmented tissues, including melanin and foreign materials commonly found in tattoos, absorb this wavelength of light. Reports indicate the procedure's success in fading or removing tattoos without injury to the skin surface or significant scarring.⁸

Other Lasers

The excimer laser at 193 nm or 248 nm can produce precise ablation or clean incisions. Other excimer lasers may be useful for selective photothermolysis of melanocytes.⁴ The low-energy laser, or helium-neon laser, at 632 nm, is used as a pointer for lectures and as a directing device for the invisible beam of the CO₂ laser but may also be effective in enhancing the healing of such wounds as chronic skin ulcers.⁴

Laser Safety

Appropriate safety measures are a must for laser use. Patients and health care personnel must wear eye protection that is appropriate for the type of laser used. Eyeshields must be inserted before performing laser surgery on the eyelids.

The carbon dioxide laser can ignite dry surgical drapes or other combustible materials. Cloth and paper surgical drapes that surround the operative field should be saturated with water or saline.

The laser plume should not be inhaled and should be evacuated immediately from the operative field using a high-capacity smoke evacuator. A "laser in use" sign should be on the door during laser use.

Future

The future of laser use in dermatology appears promising. New technologies will create more effective forms of laser therapy, but physicians will need to be knowledgeable about the use of lasers in order to inform patients of realistic expectations and treatment risks. **MM**

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REFERENCES

1. McDaniel DH. Cutaneous vascular disorders: advances in laser treatment. *Cutis* 1990;45:346-9, 354-60.
2. Bailin PL, Ratz JL, Wheeland RG. Laser therapy of the skin. A review of principles and applications. *Otolaryngol Clin North Am* 1990;23:123-64.
3. Gregory RO. Applications of lasers in plastic surgery. *J Fla Med Assoc* 1989; 76:595-8.
4. McBurney EI. Dermatologic laser surgery. *Otolaryngol Clin North Am* 1990;23:77-97.
5. Hanke CW. Lasers in dermatology. *Indiana Med* 1990;83:394-402.
6. Garden JM, Geronemus RG. Dermatologic laser surgery. *J Dermatol Surg Oncol* 1990;16:156-68.
7. Goldberg DJ. Laser surgery of the skin. *Am Fam Physician* 1989;40:109-16.
8. Wheeland RG. Cutaneous laser surgery. *Otolaryngol Clin North Am* 1990;23:165-9.
9. Brauner G, Schlifman A, Cosman B. Evaluation of argon laser surgery in children under 13 years of age. *Plast Reconstr Surg* 1991;87:37-43.
10. Tan OT, Sherwood K, Gilchrist BA. Treatment of children with port-wine stains using the flashlamp-pulsed tunable dye laser. *N Engl J Med* 1989;320:416-21.
11. Garden JM, Polla LL, Tan OT. The

treatment of port-wine stains by the pulsed dye laser. *Arch Dermatol* 1988; 124:889-96.

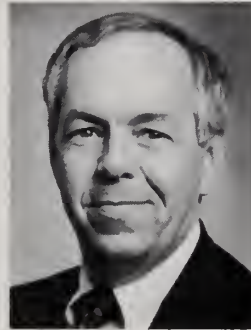
12. Geronemus RG, Ashinoff R. The medical necessity of evaluation and treatment of port-wine stains. *Dermatol Surg Oncol* 1991;17:76-9.

13. Reyes BA, Geronemus R. Treatment of port-wine stains during childhood with the flashlamp-pulsed pulsed dye laser. *J Am*

Acad Dermatol 1990;23:1142-8.

14. Ashinoff R, Geronemus RG. Capillary hemangiomas and treatment with the flash lamp-pulsed pulsed dye laser. *Arch Dermatol* 1991;127:202-5.

15. Pickering JW, Walker EP, Butler PH, van Halewyn CN. Copper vapour laser treatment of port-wine stains and other vascular malformations. *Br J Plast Surg* 1990;43:273-82.



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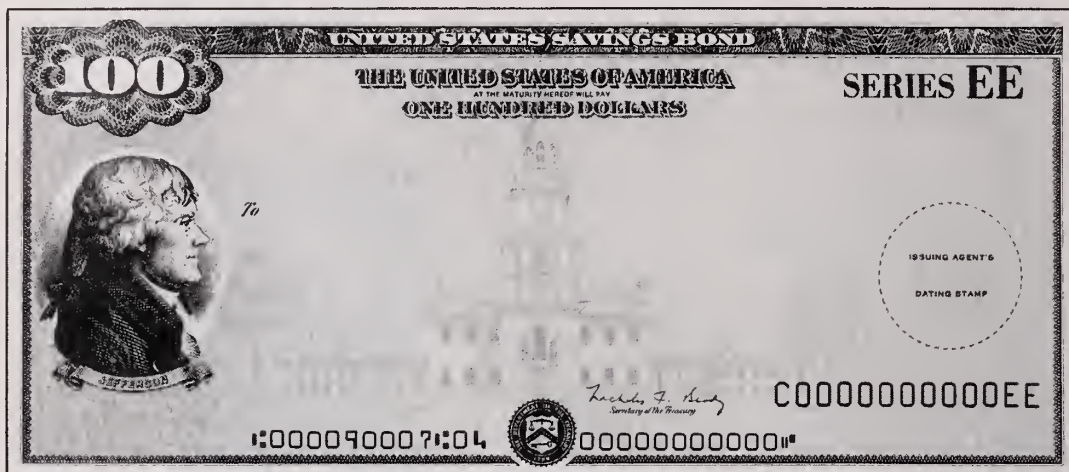
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The Physician's Response to Domestic Violence

Legal Issues

Loretta M. Frederick, J.D.

Physicians who wish to respond fully and appropriately to victims of domestic abuse must be aware of the legal remedies available to protect the victims from future abuse and the legal implications of treating them.

Minnesota is a national leader in the movement to provide legal protection for victims of domestic abuse. The state's ground-breaking laws have often been copied in other states, and Minnesota's battered women's movement is considered a leader in the effort to enact and implement effective legal responses to domestic abuse.

The use, enforcement, and administration of these model civil and criminal laws depend, however, on the effort of Minnesota citizens. Physicians, like police officers, are often the first persons approached by victims seeking assistance. They are, therefore, in a unique position to offer information about legal remedies and protections. Physicians can best respond if they are familiar with the legal measures available to protect victims and with the domestic abuse reporting laws.

Order for Protection

An Order for Protection is the most commonly used and most important remedy available to battered women* in Minnesota. The Order for

Protection is a court order that tells the abuser to stop abusing or threatening the victim and can ban the abuser from entering the victim's home.

An Order for Protection is avail-

"Physicians are
in a unique position
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and protections."

able to any person who is a victim of "domestic abuse," which is defined by law as "physical harm, bodily injury, assault, or the infliction of fear of imminent physical harm." The domestic abuse must have occurred between "family or household members," defined as spouses, former spouses, parents and their children (an adult household member must file on behalf of a minor child), persons related by blood, persons who either live together now or have done so in the past, and persons who have a child in common, including situations where the woman is pregnant and the abusive man is alleged to be the father.

The Order for Protection is available to women or men battered in heterosexual or homosexual relationships, as well as to roommates and family members. Couples who have dated but have never lived together are not covered by this law.

The procedure for obtaining an Order for Protection is relatively simple. The victim goes to the court administrator's office at the local

county courthouse for forms and assistance, which the office must provide to anyone who asks. The victim does not need an attorney to assist her in either the application or the court hearing. The customary court filing fee and cost of service are waived in these proceedings.

After applying for the Order for Protection, the victim presents the petition to a judge for consideration. If the petition alleges an immediate and present danger of domestic abuse, the court may issue an immediate order to restrain the abusing party from committing acts of abuse, ban the abuser from the petitioner's residence (even if it is a shared dwelling), and ban the abuser from the petitioner's place of employment. The court must, at this point, order a hearing to be held within 14 days. The alleged abuser (the respondent) is personally notified, usually by the local sheriff's deputies, who will also ensure that the abuser leaves the residence if so ordered.

At the court hearing, the judge or referee may expect the parties, at least the petitioner, to testify about the abuse. After hearing the testimony and reading the documents, the court will decide if abuse has occurred. If it has, the judge will issue an order, which will usually be in effect for one year. The order can restrain the abusing party from committing acts of domestic abuse, ban the abusing party from the victim's residence and place of employment, award temporary child custody and visitation, establish temporary child and/or spousal support, order treatment for the abuser or counseling for both parties if they have children and the victim requests it, and award temporary use of personal property, such as cars.

Violation of the Order for Pro-

*Because assaults on women by their intimate partners constitute approximately 95 percent of all domestic assaults and because such assaults are usually only part of an overall pattern of controlling and threatening behavior, the author uses the term "battered women" in this article. The remedies described are also available to protect children and other individuals who suffer domestic abuse.

rection is a misdemeanor. If the police have reason to believe the abuser has committed another act of abuse or has gone to the victim's place of employment or residence in violation of the order, they must, by law, arrest the abuser.

Physicians should be aware of the types of provisions patients can request from the court. If the victim has this information, she is in the best position to decide whether she should apply for protection. Every health care facility should make brochures from local legal-aid or battered women's programs readily available. The materials often describe the Order for Protection process and give details about local advocacy and safe-shelter programs. The physician may be tempted to instruct a battered woman to get an Order for Protection, but it is better to provide information about its availability and encourage the woman to seek support from battered women's programs in the area. Separation from an abuser is the most dangerous, sometimes lethal, point in a violent relationship, and the adult victim herself can best evaluate when and how to escape the abuse.

In addition to offering support and information about the Order for Protection, the physician could offer to provide a statement about the nature, extent, and probable cause of the woman's abuse-related injuries. The physician also should help the woman acquire copies of relevant medical records to use as evidence in any subsequent legal proceeding.

Dissolution of Marriage

Divorce, called "dissolution of marriage" in Minnesota, is another legal remedy available to women who are abused by their husbands. In a divorce proceeding, the court can issue restraining orders as in an Order for Protection. However, there is no legal requirement that police arrest an abuser who violates a divorce restraining order, so the battered woman might want to obtain an Order for Protection in addition to the regular divorce court orders.

The dissolution of marriage can only be used if at least one spouse has been a resident of the state for at least

180 days. The dissolution court can make permanent property distribution orders, as well as child or spousal support, child custody, and visitation orders.

Threats to hurt, kill, kidnap, or win custody of children are among the most common and effective means batterers use to keep their partners from leaving them. Because parents' mental and physical health is one factor in courts' child-custody decisions, and because battered women often suffer from situational but severe anxiety and/or depression as a result of abuse, it is imperative that physicians avoid making diagnoses, particularly of mental health problems, that do not clearly reflect the impact of abuse on the victim's condition. Many battered women have lost custody of their children to violent fathers, in part because the fathers used inaccurate diagnoses of mental illness to assert that the mother was too mentally unstable to be given custody.

An attorney must be retained to file for a divorce. Many battered women have difficulty obtaining legal counsel because they don't have the money or they don't know which local attorneys are sensitive to domestic abuse issues. Physicians should be prepared to provide information about local legal-aid programs and bar association referral services. Local battered women's advocacy programs are often a good source for information about attorneys who are experienced at representing battered women.

Reporting vs. Confidentiality

Battering as a criminal behavior

Nearly all domestic abuse victims that physicians treat are victims of crime—most commonly assault, which can range in severity from felony assault (which might involve use of a weapon or serious injury) to the misdemeanor of fifth degree, or simple assault. In Minnesota, police may arrest a person if they have probable cause to believe the person has assaulted a family or household member. If the arrest is for fifth-degree assault, it must occur within four hours of the assault. The victim

need not make the arrest decision nor support the arrest. As with many laws, enforcement is sometimes lacking, and in some communities, police do not make arrests even when there is substantial evidence.

Many battered women are victims of additional crimes, as well.

**"Physicians are often
the first persons
approached by
victims seeking
assistance."**

For example, most battered women are also raped by their abusers. In Minnesota, rape is a crime, regardless of whether the perpetrator and victim are married. There are four degrees of felony-level criminal sexual conduct, ranging from fourth degree, which involves sexual contact accomplished by force or coercion, to first degree, which can involve sexual penetration accomplished with force, coercion, use of an accomplice, use of a weapon, or infliction of fear or imminent great bodily harm. A physician treating a patient for rape-related injuries should be sure to inform the victim that rape is a crime even if the perpetrator is her husband.

Children can be affected by domestic violence as primary or secondary victims. Studies indicate that children who witness domestic abuse may experience depression, anxiety, behavior problems, sleep pattern disturbances, and various psychosomatic illnesses. Children can also be direct victims of abuse in battering cases. Several studies relying on adult victims' self-reports indicate that 53 percent to 70 percent of the men who batter their spouses also abuse their children. Other studies based on child abuse hospital records and mothers' medical records show that 45 percent to 51 percent of the mothers of abused children are battered.

It is a crime in Minnesota to use unreasonable force or cruelty on a

child when the act causes substantial emotional harm. It is also a crime to willfully neglect a child when it causes substantial harm to the child's physical or emotional health. It is a gross misdemeanor to confine or restrain a child (by tying, locking, chaining, or caging, for example) for prolonged periods of time and in a cruel and excessive manner when it results in substantial harm to the child.

Reporting criminal or other abuse

The criminality of domestic abuse raises questions about the extent of a physician's right or responsibility to report the crime to authorities or to provide information to the court. The answers to such questions vary with the patient's age, health, and other characteristics. Most battered women are legally competent adults who have the right to confidentiality in the physician-patient relationship. Generally, only the patient can waive this right, which can prevent the physician from breaking confidence even to report criminal acts.

State law requires health professionals to report all bullet wounds and other injuries from the discharge of a firearm. A similar statute requires health care professionals to report severe burn injuries.

A physician who is confronted with evidence that a legally competent adult patient is a victim of abuse that did not involve a firearm may feel compelled to report the crime to law enforcement, a human services agency, or a battered women's program. Legal and ethical provisions, however, prevent such a report. The physician's alternative is to express concern to the patient, without placing blame, and to offer information, resources, and referrals.

Confidentiality rules are somewhat different in the case of a domestic abuse victim who is also a vulnerable adult. A vulnerable adult is a person who 1) lives in or receives services from a facility licensed by the Minnesota Department of Health (e.g., nursing homes, hospitals) or Department of Human Services (e.g., chemical dependency) or 2) regardless of place of residence, is unable or

unlikely to report abuse or neglect without assistance because of physical or mental function or emotional status.

By law, physicians must report abuse and neglect of such vulnerable adults, and failure to do so can result in civil damage actions or criminal charges against the physician. Physicians who consider filing a report must decide whether the victim is, in fact, a vulnerable adult. Usually, the answer depends on whether the patient is unable to report the abuse or neglect because of "impairment of a

"Most battered women are legally competent adults who have the right to confidentiality in the physician-patient relationship."

physical or mental function or emotional status." When it is not clear whether the patient is a vulnerable adult, the physician is best advised to offer the patient information and referrals in a supportive manner. It is important to note that reporting abuse will not necessarily increase the victim's safety. In fact, after being reported, the abuser may discourage the victim from seeking medical treatment, and fear of the abuser might prevent the victim from seeking it.

When the victim is a child, applicable confidentiality provisions are more clear. Physicians must report suspected physical abuse, sexual abuse, or neglect of a child under the child abuse reporting law. The oral report must be immediate, followed by a written report made within 72 hours, exclusive of weekends and holidays.

The patient's right to confidentiality extends to situations where the physician or medical records are subpoenaed. Minnesota law estab-

lished a testimonial privilege in the physician-patient relationship. This prevents the physician, or other personnel, from divulging without the patient's permission any information or opinion that he or she acquired while attending the patient in a professional capacity or that was necessary to enable the physician to act in that capacity. Although there are some exceptions to this rule, such as medical malpractice litigation, child abuse, and vulnerable adult cases, the testimonial privilege is an unqualified one. However, in Minnesota, if a third person, other than medical personnel covered by the privilege, is present in the exam room with the acquiescence of the patient, the privilege does not exist and the patient cannot prevent the physician from disclosing information to a court.

In addition, the physician-patient privilege is inapplicable to child abuse or neglect. This permits physicians to testify in court about alleged neglect or physical or sexual abuse of a child.

Regardless of whether the law permits or requires a physician to report a domestic abuse incident or injury, the physician should be aware that reporting the abuse may not improve the victim's safety. Experience shows that it is very important to provide the patient with clear, supportive messages, information about legal remedies, and referrals to battered women's advocacy or shelter programs.

MM

Loretta Frederick is the managing attorney of the statewide Battered Women's Legal Advocacy Project, a joint effort of the Minnesota Coalition for Battered Women and Southern Minnesota Regional Legal Services, Inc. She currently lives in Winona, Minnesota.

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Market Timing

Prime Investment Strategy or Optimist's Dream?

Dale L. Waltz

In the midst of the turbulent investment markets of the early 1980s, I found myself in a crowded conference room listening attentively to a marketing representative from the Lowry Market Timing Fund explain (rather loudly) the overwhelming benefits of his fund. As a retail broker with five years' experience at the time, I was leery; my skeptical side took over as he told my peers and me that the fund invested in rising stock markets and sold its positions before the markets soured. After all, why would anyone want their capital invested in markets that were going down?!

At that point, it was time for a reality check. Did I feel insulted and offended by just another high-pressure sales presentation that couldn't possibly hold water in the real world, or was I the victim of an Upper-Midwest upbringing, leading me to believe that anything worthwhile had to be either earned the hard way or chalked up to blind luck? I owed it to myself and my clients to find out. This article is the culmination of extensive reading, research, and reflection in the decade since.

Asset Allocation vs. Market Timing

Traditional asset allocation, or objective setting, entails deciding on a base mix of the various asset classes (e.g., stocks, bonds, cash instruments) for an investment portfolio. Each asset class has relatively well-defined characteristics over the long term. Since the overwhelming majority of investment performance can be explained by asset class selection and weightings, successful investing requires matching the overall goals of the investor (e.g., cash flow needs,

growth, risk tolerance, and time frame) to the appropriate investment vehicle. This approach leads to major portfolio shifts only if a material change occurs in the investor's objectives.

“Market timers
must be correct a
superhuman amount
of the time to
outperform the
market.”

Market timing, on the other hand, is the *active* switching of assets within an investment portfolio among stocks, bonds, and cash equivalents in the hopes of being fully invested in the best performing market(s) and avoiding the worst. Devotees of market timing believe they can deliver substantially higher returns, reduce risk, or both. But can they?

The Evidence

Although the concept is intuitively appealing, let us examine the facts to see if market timing really works. Over the years, a growing number of studies have been done on the subject. In 1974, William F. Sharpe, a Stanford University finance professor, conducted one of the earliest academic studies of market timing. After examining market data from 1934 to 1972, he concluded that a market timer choosing between stocks and cash would have to be accurate 82 percent of the time to fare as well as an investor using a buy-and-hold strategy in stocks.¹

Professor Sharpe's work assumed 2 percent trading costs—a figure much higher than many of today's large institutional investors pay but that is very reasonable for most retail investors.

One unpublished study followed 100 large pension funds over a five-year period. Every one of the funds had engaged in some market timing during the five years, but *not one* had improved its rate of return as a result of timing! In fact, 89 of the pension funds actually lost an average of 4.5 percent during that five-year period due to their unsuccessful timing efforts.²

Robert Jeffrey, president of Jeffrey Co., an investment firm headquartered in Columbus, Ohio, conducted a study on the effects of market timing from 1975 to 1982. He found that the maximum quarterly losses due to market timing were twice as large as the potential gains, that overall positive stock market returns depend primarily on being present during a few brief periods, and that those periods often followed sizable declines in cash—leaving investors captive to conventional consensus and their own emotions. His research showed that only 9 percent of the quarters accounted for the entire positive real (after inflation) return of the stock market. Investors intimidated by the market collapses of 1973-74 and 1981-82 who missed out on the ensuing bull-market quarters of early 1975 and late 1982 would have done just as well in Treasury bills over the entire eight-year period.³ To see if his conclusions were valid over a longer time frame, Jeffrey tested the entire 57-year period from 1926 through 1982. In virtually every

Continued

respect, the analysis supported his earlier conclusions.

Similar findings were reported by Bernstein Research in a study of stock market timing from 1945 through 1984. Bernstein found that each dollar invested in stocks, using the Standard and Poor's 500 Index as a proxy, grew to \$72 over that 40-year period. A dollar invested in Treasury bills grew to \$5.60 over the same time frame. A market timer who didn't invest in stocks during the six largest up-years would have had only \$4.40 to show for his or her efforts—well under the returns from Treasury bills.⁴

Finally, Jess Chua and Richard Woodward, associate professors at the University of Calgary, Alberta, concluded that a market timer must be accurate 72 percent of the time to beat a buy-and-hold stock portfolio. They determined that even if a timer were 100 percent accurate in predicting bear markets and 50 percent accurate on bull markets, the timer would still be a net loser.⁵

Wrap-up

Additional studies questioning the validity of market timing can be cited ad nauseam. However, an equally credible body of evidence supporting market timing cannot be found. To be sure, a number of studies have been undertaken, but they seem to cluster around very short time periods during which one or a few great calls made a large impact, or they focus on computer simulations showing how much greater investors' returns could have been had they predicted a number of consecutive bull and bear markets. If market timing is ever to become an accepted and viable investment strategy, back-dated historical studies will not suffice. Market timing will need to be proven in a real-world setting.

It is worth noting that not one of the best-known long-term investors—John Templeton, Warren Buffett, or Peter Lynch—follows a market-timing strategy. In fact, all condemn it. Why is it that market timing has been unable to produce champions of this ilk?

Don Phillips, editor of *Mutual Fund Values*, a publication devoted

to the evaluation and analysis of hundreds of mutual funds, says, "Despite the overwhelming evidence against timing, it—like alchemy before it and astrology to this day—still boasts devoted followers."⁶

Stock market returns are neither consistent nor predictable—but over the long term they have in the past

"Not one of the best-known long-term investors follows a market-timing strategy."

and likely will in the future exceed those of fixed income and cash equivalents. Market timers must not only be correct a superhuman amount of the time to outperform the market, but they must also overcome commissions, as well as taxes, for taxable clients.

Market timing remains an optimist's dream. A rational investor can only judge an investment strategy's merits by its demonstrated real-world record, and market timing has not come close to producing a record investors would wish to emulate. There will always be another hot hand appearing on the horizon, but we can best chalk that up to statistical "noise" given the number of investors seeking immediate gratification. If and when timers put together a proven track record instead of simulated wishes, it will then be time to revisit the issue.

By the way, last summer the Lowry Market Timing Fund was mercifully put to rest—along with its performance record—as it was merged into another mutual fund with entirely different objectives. There is order in the universe, after all!

MM

Dale Waltz, now a principal and portfolio manager with Compass Capital Management in Minneapolis, has over 15 years' investment

experience. Formerly, he was vice president and senior portfolio manager at Norwest Investment Management and a registered representative with Piper, Jaffray and Hopwood. He is a member of the Twin Cities Society of Security Analysts.

REFERENCES

1. Sharpe WF. Likely gains from market timing. *Financial Analysts Journal* 1975; March/April.
2. Ellis D. Investment policy: how to win the loser's game. Homeville, IL: Dow Jones-Irwin, 1985.
3. Jeffrey RH. The folly of market timing. *Harvard Business Review* 1984; July/August: 102-10.
4. Bernstein Research. Investment strategy: stock market timing may be hazardous to your wealth. New York: Sanford C. Bernstein & Co., 1986.
5. Donnelly B. Market timing in new form gains adherents. *Wall Street Journal* 1988 July 7.
6. Phillips P. Another one bites the dust. *Mutual Fund Values* 1991 July 12.



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HMSS Tackles the Tough Questions

Thomas A. Stolee, M.D.

Let's play a game of 20 questions. As you think about the answers, ask yourself how important this particular item is to you, your practice, your hospital medical staff, and your patients.

1. Are you concerned about the certification and precertification formats that health care insurers use? If you want them changed, what type of improvements would you suggest?

2. Do you feel that there is a "due process" problem in the awarding of severity points and sanctions by the PROs? Do you feel there should be an arbitration process? How would you suggest this be done?

3. Do you feel that medical utilization review is the practice of medicine? Do you think that the decisions payers make to allow or disallow hospitalization should be made by physicians? Should physicians making such decisions in our state be licensed in Minnesota?

4. Do you feel that parameters of care should be developed by federal agencies or by physicians? Do you feel that federally developed parameters of care should be used in ambulatory surgery?

5. Do you feel changes should be made in the new Medicare payment system (RBRVS)? What changes should be made? Why?

6. We spend close to \$700 billion per year on health care in the United States. Much of this cost is administrative. Do you think the cost of medicine should be studied so that changes can be made? What changes would you suggest to control costs?

7. In Maryland, hospitals have suffered Medicare decertification based on a single incident without due process. This situation is starting to occur elsewhere around the country. Does this concern you? What do you want to do about it?



"Reaching a consensus with federal agencies and legislative bodies is a difficult process but one that must take place."

8. In Ohio, legislation has been introduced to mandate assignment for all private and public carriers, pay hospitals for services of all hospital-based physicians, and set uniform fees for all private and public services. Do you think this could happen in Minnesota?

9. Hospital medical staff bylaws exist for your legal protection. Who writes them in your hospital? The administration? The medical staff? What's in them? Are you concerned? Would you like to see organized medicine develop model bylaws?

10. Who should elect medical staff officers? The medical staff? The administration? The hospital board?

11. Is the Joint Commission on the Accreditation of Healthcare Organizations fulfilling its function? What are its strengths and weaknesses? How should it be improved?

12. Should physician reviewers

be of the same specialty? Should they be licensed in the same state? Should physician review be a function of organized medicine or private review companies?

13. Should physicians and hospitals be allowed to enter into joint ventures? Are there any problems such as anti-trust considerations? What are the advantages?

14. How much do you know about the National Practitioner Data Bank? What problems does the data bank pose for physicians?

15. Do practice parameters benefit medical practice? Do they pose potential medical-legal problems? How do you think they should be used?

16. Physicians in this country have been vilified by apparently inaccurate infant mortality statistics. How do you think this should be corrected?

17. Should HIV testing be mandatory for health care workers? Should reporting to licensing bodies be required? Should HIV-positive doctors do invasive procedures? What are these "invasive procedures"?

18. Should doctors be allowed to order HIV testing for their patients without special written permission? Should they be allowed to order HIV testing just like CBCs, glucoses, etc.?

19. If an HIV-positive doctor is not allowed to practice, should the doctor be declared disabled so he or she can collect disability insurance? How do we convince the insurance companies?

20. Do all the doctors on your medical staff understand the Patient Self-Determination Act? What are physicians' obligations, if any? What are the medical staff's responsibilities?

Don't write to tell me your opinions on these matters. These issues were thoroughly discussed and positions were decided at the recent AMA

Hospital Medical Staff Section meeting in Las Vegas. After consensus is reached on various questions, the AMA works with the proper agencies or organizations to bring about changes. These changes, albeit slow in the making, are usually accomplished. Reaching a consensus with federal administrative agencies and legislative bodies is a lengthy, difficult process, but one that must take place in a democratic society.

Each hospital in Minnesota is entitled to an HMSS delegate, whether the hospital has 12 or 500 beds. To qualify, you must be an AMA member and you must be duly elected by your medical staff or appointed by your elected chief of staff.

I'm amazed that despite the fact that each hospital medical staff can have direct input into national policies, only six people (four from the Twin Cities, one from Hibbing, and one from Duluth) represented Minnesota at the recent assembly. I've come up with possible reasons for doctors' lack of interest in their own professional future:

1. Doctors are apathetic. Being a doctor means taking an active role in treatment. So, how can a physician be apathetic about the world and still practice medicine?

2. Doctors and hospitals cannot afford the cost of airfare and three days' lodging. No comment.

3. Doctors are not informed. Letters and information go to every chief of staff and administrator before the June and December meetings. I would hope that these people do not abrogate their leadership responsibilities. The June 1992 meeting will be announced by April. If it's not brought up at your staff or executive committee meeting, ask why not.

4. Doctors are reluctant to take the time. Many regulators count on this.

As MMA president, I am requesting that every hospital medical staff in Minnesota appoint or elect a representative to attend the 1992 annual AMA-HMSS conference June 19-20 in Chicago. If you have any questions, contact Dr. Homer Venters, chair of the Minnesota Delegation, at St. Paul-Ramsey Medical Center.

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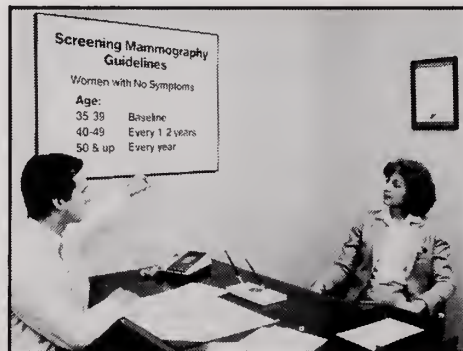


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People and Places Making Medical News

People

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Minneapolis Health Commissioner

Carolyn McKay, M.D., former director of Maternal and Child Health at the Minnesota Department of Health, is the new Minneapolis Commissioner of Health. Mayor Don Fraser and other members of the city executive committee nominated her to the position in December. McKay said she hopes to focus attention on combatting premature births, sudden infant death syndrome, and death by violence.

McKay succeeds David Lurie, who resigned in June to head the Seattle-King County (Washington) Health Department.

Ramsey County Medical Society President

J. Randolph Beahrs, M.D., a urologist and MMA speaker of the house, has been elected president of the Ramsey County Medical Society for a one-year term. He succeeds internist Frank J. Indihar, M.D.

Family practice physician Donald S. Asp, M.D., was voted president-elect.

HealthEast Medical Director

William Hosfield, M.D., has been named medical director of the adolescent intervention unit at HealthEast Divine Redeemer Memorial Hospital in South St. Paul. Hosfield is certified by the American Board of Psychiatry and Neurology and has a subspecialty in the treatment of children and adolescents. The intervention unit serves young people aged 13 to 18.

MDH Assistant Commissioner

Barbara Colombo Nerness has been named an assistant commissioner of health at the Minnesota Department of Health. In her new position, she will head the agency's Bureau of Health Delivery Systems, which includes programs in maternal and child health, health promotion, and local public health. Nerness, a registered nurse and lawyer, joined the Department of Health earlier this year as director of legal and policy affairs.

Medica Director of Public Policy Development

Lois B. Wattman, formerly legislative counsel for Blue Cross and Blue Shield of Minnesota, has been named director of public policy development for Medica. Before joining Blue Cross and Blue Shield in 1986, Wattman was director of the Minnesota Medical Association's division of health policy and initiatives.

Hungarian Family Practice

Five Minnesota family physicians led a delegation to Hungary in January to help the country establish its first training program in family medicine. The delegation held a four-day meeting with about 30 Hungarian physicians to establish a nationwide postgraduate educational curriculum.

The relationship between family physicians in Minnesota and Hungary was established through the efforts of native Hungarian Zoltan Varga, M.D., who left his homeland in 1987. He is now in the second year of his family practice residency training at St. John's Hospital in St. Paul.

When Varga heard in mid-1991 that his native country wanted to start training family physicians, he and David Current, M.D., director

of the St. John's residency program, arranged the visit to Hungary. In addition to Varga and Current, the delegation included Edward Ciriacy, M.D., chief of family practice at the University of Minnesota; Robert Bosl, M.D., president of the Minnesota Academy of Family Physicians; Robert Beck, M.D., vice president of medical affairs at the HealthEast hospital group; and Sonia Patten, Ph.D., assistant professor at the University of Minnesota.

Bakken Professorship

Frederick B. Silver, a faculty member at Rutgers University and the Robert Wood Johnson Medical School (RWJMS) in New Jersey, has been named the first Earl E. Bakken Professor in Biomedical Engineering at the University of Minnesota. An MIT graduate, Silver is chief of the division of biomaterials pathology, which he founded, and director of graduate studies in biomedical engineering at Rutgers and RWJMS. At the University of Minnesota, he will be senior associate director of the Biomedical Engineering Center, where he will direct the graduate studies and industrial relations programs. He will assume his new position July 1.

Places

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St. Paul-Ramsey Selected for National Heart Study

The National Institutes of Health recently designated St. Paul-Ramsey Medical Center as one of 25 principal investigation sites for a major research project on sudden cardiac death. The national study, called MUSTT (Multi-center

Unsustained Tachycardia Trial), will take five years to complete, involve 4,500 patients, and cost \$10 million. Pablo Denes, M.D., is the principal investigator at Ramsey.

Ramsey is working with other local hospitals to recruit patients for the study, which began in January. An ideal candidate is one who has had a previous heart attack and has ventricular arrhythmias. For more information, call Kathy Vittum, R.N., at 612/221-3660 or 221-3462.

Mayo, 'U', and BCBSM Join Breast Cancer Study

The University of Minnesota and Mayo Clinic are two of 37 centers designated by the National Cancer Institute to participate in a national study of autologous bone marrow transplants to fight breast cancer. Such transplants are used to treat leukemias and Hodgkin's disease, but no definitive study has been conducted on bone marrow transplants to treat breast cancer. A pilot study of such transplants at Duke University showed optimistic results, with cancer relapse rates dropping by about one-half, but no women were assigned to control groups and given conventional therapy.

The study will include 340 women whose cancer has spread to 10 or more lymph nodes in the armpit but has not spread to the rest of their bodies. The women will be randomly assigned to transplants or conventional therapy.

As part of the study, Blue Cross and Blue Shield of Minnesota will spend up to \$1.5 million during the next three years to help cover the experimental treatment in 20 to 25 of its patients. Nationwide, 16 BCBS plans will help pay for the cost of treating more than 1,200 women.

Methodist Opens Oncology ICU

The new George and Mary Lee Hess Oncology Intensive Care Unit opened at Methodist Hospital in St. Louis Park with a ribbon-cutting ceremony January 15. The 10-bed unit, which was recently completed as an addition to the hospital's southeast tower, features a controlled environment for cancer patients requiring isolated conditions.

The unit is named after George and Mary Lee Hess, both former Methodist patients who died of cancer. Through a planned estate gift, they donated \$1.2 million—the largest gift ever received by the Methodist Hospital Foundation.

Ramsey County Board Rejects Abortion Ban

The Ramsey County Board rejected a proposal by Commissioner Duane McCarty that would have added abortion restrictions to the lease agreement between the board and St. Paul-Ramsey Medical Center. The county owns the hospital and land, and the lease is necessary for the hospital to obtain bond financing for new construction. The board voted 4-3 against McCarty's proposed provision, which would have banned the hospital from performing abortions unless the woman's life was in danger or she was a victim of rape or incest.

St. Paul Red Cross to Expand

As part of a national effort to standardize and consolidate the American Red Cross Blood Bank system, the St. Paul laboratory will be upgraded and changed to a regional center next summer. ARC's 52 blood-testing laboratories will be consolidated into 14 regional centers, which will perform about 95 percent of all tests on blood samples, including tests for infectious diseases. The 38 remaining labs will continue to provide routine services and blood tests, such as matching bone marrow recipients with the proper unit of blood.

The St. Paul center will add about 50 employees, and its lab will eventually process about 500,000 samples of blood annually. It currently handles about 190,000 samples.

Health Risk Management Accredited

Health Risk Management, Inc., a Minneapolis-based international provider of health care information and management services, announced in December that it is the first managed care company in Minnesota to receive national accreditation by the Utilization Review Accreditation Commission.

Gillette Arches to be Saved

The St. Paul City Council voted December 31 to preserve the central arches of the former west wing of Gillette State Children's Hospital in Phalen Park but to demolish the rest of the building. The hospital moved to downtown St. Paul in 1978.

Socioeconomics

Emergency Room Visits Up

Minnesota's emergency rooms have experienced large increases in visits, often from patients with minor illnesses such as sore throats, fevers, and strained muscles. Many doctors and hospital administrators believe the increase in visits is a result of state Medicaid policies, which do not require a copay to visit emergency rooms. Most HMOs and insurance companies create a financial disincentive by requiring patients to pay part of the bill when they visit the emergency room. Patients in rural areas and small towns, where there is a shortage of physicians, may also find it faster to visit emergency rooms than their doctors' overcrowded offices.

The largest increases were at rural and small-town hospitals, where emergency department visits

rose from 358,027 in 1981 to 653,828 in 1990, an increase of 83 percent, according to the Department of Health. In Minneapolis, the increase was 58 percent, up from about 140,500 visits to nearly 200,500. St. Paul's emergency room visits went from 141,435 in 1981 to 162,698 in 1984, but several hospitals closed during the decade, and the number of visits leveled off after 1984. Visits to suburban Twin Cities hospital ERs increased from just under 200,000 in 1981 to 311,000 in 1990.

Twin Cities Hospitals Under Financial Stress

Financial stress remains a problem for Twin Cities hospitals, according to a report from the Council of Hospital Corporations released in December.

After increasing in 1989, three important factors declined in 1990: the number of patients treated declined 0.3 percent, total inpatient days fell 2.6 percent, and the average length of stay dropped 2.3 percent. In addition, the number of outstate Minnesotans treated in Twin Cities hospitals decreased for the first time in five years.

One positive finding was that the number of outpatient visits has been increasing since 1984. It's more cost efficient to treat patients on an outpatient basis than to hospitalize them, said Vic Ellison, spokesperson for the council.

Only one-third of Twin Cities hospitals are earning the 4 percent return on investment that experts say they need to survive.

MedCenters Adds Aspen to Network

MedCenters Health Plan has added the Aspen Medical Group, including seven new clinics and 84 new physicians, to its provider network.

Aspen Medical Group is a multispecialty practice offering a broad range of patient services. MedCenters is the third largest HMO in Minnesota, with more than 265,000 members.

Fairview Acquires Interest in Riverside Medical Center

Fairview health system purchased Carondelet LifeCare Corporation's 50 percent interest in Riverside Medical Center in December.

Riverside was incorporated in 1987 as a joint venture of Fairview Riverside and St. Mary's hospitals. The operating agreement consolidated services, management, and personnel, but the respective parent companies—Fairview and Carondelet—retained ownership of their own assets. Under the terms of the acquisition, Riverside will be fully integrated into the Fairview system. According to Richard A. Norling, Fairview president and chief executive officer, there are no immediate plans to change the medical center's operation or management structure.

Sister Mary Madonna Ashton, president and chief executive officer of Carondelet LifeCare, said the proceeds of the sale will allow the Sisters of St. Joseph to continue a number of its programs and to broaden efforts in serving the needs of the poor, homeless, abused, chemically dependent, and elderly.

Innovations

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Coronary Laser Procedure

Cardiologists at St. Paul-Ramsey Medical Center in St. Paul are using laser energy to vaporize plaques in coronary arteries. Ramsey is one of 20 hospitals nationwide conducting clinical trials of the Eclipse laser, a cold laser angioplasty device.

Two patients at St. Paul-Ramsey were the third and fourth people in the world to have heart attacks instantly stopped with the laser. Both were doing well after the surgery. As of January 1, St. Paul-Ramsey had unclogged coronary arteries in 20 patients using the device.

"The data from more than 400 patients who underwent the Holmium Laser angioplasty nationwide reveal excellent results,

very low rate of complications, and possibly significantly lower rate of recurring blockage," said On Topaz, M.D., an interventional cardiologist at Ramsey who has performed the laser procedure.

The laser has been used in conjunction with balloon angioplasty in the cases performed at Ramsey. The laser procedure is much the same as balloon angioplasty, in which the catheter is threaded through the femoral artery to the area of blockage. Once the laser catheter reaches the blockage, the physician uses several small pulses of laser energy to vaporize the blockage. The laser uses holmium and thulium, both non-toxic, environmentally safe gases.

The laser's apparent success could lead to improved treatment and reduced cost for heart attack victims. The laser catheter, which is used only once, costs about \$900 compared with \$2,000 for the clot-destroying drug TPA.

New Equipment Diagnoses Heart Attacks

New equipment to diagnose heart attacks in patients coming to the hospital with chest pain has shown significant improvement over traditional methods in a study conducted recently at Fairview Southdale Hospital. Results of the study were published in the January *Annals of Emergency Medicine* in an article by David Justis, M.D., emergency physician, and William Hession, M.D., cardiologist and medical director of the Heart Center, both of Fairview Southdale.

The equipment tested was a 22-lead electrocardiogram (ECG) developed by Cherne Medical, Inc., of Minneapolis. During the study, 163 patients were tested on both 22- and 12-lead ECGs. Use of the 22-lead ECG showed a significant improvement over the traditional 12-lead ECG in identifying those

patients with chest pain who were actually having a heart attack.

In the article, Justis concludes that the 22-lead ECG is accurate in diagnosing more than 97 percent of heart attacks and reduces by 69 percent unnecessary hospital admissions to determine if the patient has suffered a heart attack.

Medical Research

Herpes Drug Fights Chickenpox

The antiherpes drug acyclovir effectively fights chickenpox, said University of Minnesota virus specialist Henry Balfour, M.D., in the November 28 *New England Journal of Medicine*. Balfour reported that a trial involving 815 healthy children aged 2 through 12 showed that the drug relieves symptoms, reduces the number of sores, and shortens the illness by about 25 percent. Balfour reported similar results in a smaller study published in the April 1990 *Journal of Pediatrics*.

In his new report, Balfour and his 11 coauthors said the treatment cost for acyclovir, ranging from \$25 to \$70, is made up by allowing the child's parent to return to work a day earlier than otherwise.

Mayo Study Finds Family Link for Heart Disorder

A Mayo Clinic study offers new evidence that the often life-threatening heart disorder idiopathic dilated cardiomyopathy may have a previously undocumented familial link, according to a report in the January 9 *New England Journal of Medicine*. In a study of 59 patients diagnosed with cardiomyopathy and 315 of their relatives, Mayo researchers determined that up to 20.3 percent (about one in five) of the families had additional family members who showed signs of the disease.

Previous research conducted at Mayo and elsewhere identified familial cardiomyopathy in only 6 percent to 8 percent of cases

studied, but these studies used family medical histories as the basis for comparison. In contrast, family members participating in the Mayo study provided medical histories and underwent detailed physical examinations and laboratory tests.

"By performing detailed cardiac evaluations on 315 family members, we were able to detect a familial pattern, even in cases where symptoms had not yet surfaced," explained Mayo geneticist Virginia Michels, M.D., the study's primary investigator.

Idiopathic dilated cardiomyopathy is one of the major indications for cardiac transplantation, with associated costs of \$177 million per year. Little is known about the cause of the disease.

AIDS Update

State Hits Record 220 AIDS Cases

Minnesota saw a record 220 new AIDS cases in 1991, up from 194 in 1990 and 175 in 1989. The year-to-year increase in new cases has slowed but has not leveled off. State Epidemiologist Michael Osterholm predicted that 224 to 240 Minnesotans will develop AIDS in 1992. Last year, 186 people in the state died from AIDS, up from 160 in 1990.

Most of Minnesota's AIDS cases continue to be in gay or bisexual men, but experts are concerned about the spread of AIDS from heterosexual sex and sharing of needles during intravenous drug use. Spread of the AIDS virus from intravenous drug abuse is growing in Minnesota, according to a report from the state Human Services Department. The good news is that Minnesota has a relatively low rate of AIDS cases among drug abusers; intravenous drug use accounted for only 4 percent of Minnesota's cases in 1991 compared with 22 percent nationwide (excluding those who are gay or bisexual men and may have acquired the virus through sex). Spread of the AIDS virus by needles has caused the AIDS epidemic to soar in New York.

Citizens League Opposes Mandatory Testing

The Citizens League in December called for more limited voluntary testing than CDC officials had suggested and stated that mandatory testing could backfire if tried. CDC guidelines issued last summer called for voluntary testing for all health care workers performing "exposure-prone" procedures. The Citizens League said the risk of spreading the virus is so small during these procedures that only health care workers at reasonable risk of carrying the virus should be tested.

The league, a nonpartisan group that studies Minnesota public policy, said mandatory testing could "make the situation worse" by frightening away those who should be tested (they might find ways to avoid testing) and by giving false security to those who have been tested but later acquired the virus.

U of M Drops Plan for HIV Policy

The University of Minnesota has tabled a proposed policy that would have required surgeons performing invasive procedures to sign a declaration every two years stating that they are HIV negative. Hospital policy has prohibited HIV-infected surgeons from performing such procedures since 1987, but the university might change its policy if the CDC guidelines say there are no restrictions on what procedures HIV-infected physicians can perform.

Frank Rhame, M.D., the hospital's chief infection control officer, had drafted the proposal.

MM

A Calendar of Continuing Medical Education Courses

Provided through the MMA Medical Education Subcommittee on CME Resources. For assistance with scheduling meetings or for information on future medical meetings and CME courses, please contact the MMA office: 2221 University Avenue SE, Suite 400, Minneapolis, Minnesota 55414; 612/378-1875. Information for each entry is arranged by date; name of program; primary sponsor; location; contact person.

FEBRUARY 1992

Feb. 5-12 **HealthEast Winter Medical Seminar** HealthEast; Hawaii. CONTACT: Lisa Harrell, 1700 University Avenue, St. Paul, MN 55104; 612/641-5112.

Feb. 6 **Kidney Stones—Treatment, Prevention** Group Health Inc.; Minneapolis Metrodome Hilton, Minneapolis, MN. CONTACT: Debbie Bladine, Group Health Inc., 2829 University Avenue SE, Minneapolis, MN 55414; 612/623-8479.

Feb. 6-9 **Prostatic Diseases: Current Concepts in Diagnosis and Management** Mayo Clinic/Mayo Foundation; The Breakers, Palm Beach, FL. CONTACT: Rita Kunz or Jan Fleck, Mayo Clinic, 200 1st Street SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

Feb. 7 **Domestic Violence: Assessment and Plan for Physician Action** St. Paul-Ramsey Medical Center; Holiday Inn East, St. Paul, MN. CONTACT: Bonnie Young, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

Feb. 8 **Winter CME Lake Superior Chapter MAFP** Lake Superior Chapter MAFP, Holiday Inn, Duluth, MN. CONTACT: D. R. Weslander, 330 North Eighth Avenue East, Duluth, MN 55805; 218/723-1112.

Feb. 8-9 **Fourth Annual Issues in Pediatrics** Children's Hospital and Fargo Clinic MeritCare; Arrowwood Resort, Alexandria, MN. CONTACT: Sue Heinze, 720-Fourth Street North, Fargo, ND 58102; 701/234-5737.

Feb. 10-14 **Team Management of Diabetes Mellitus** International Diabetes Center; International Diabetes Center, Minneapolis, MN. CONTACT: Cindy Poppitz, International Diabetes Center, 5000 West 39th Street, Minneapolis, MN 55416; 612/927-3393.

Feb. 10-14 **Obstetrical and Gynecologic Update for the Primary Care Physician** Mayo Clinic/Mayo Foundation; Hyatt Orlando, Orlando, FL. CONTACT: Postgraduate Courses, Mayo Clinic/Mayo Foundation, 200 First Street SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

Feb. 14 **Burn Care Today** St. Paul-Ramsey Medical Center; Holiday Inn East, St. Paul, MN. CONTACT: Bonnie Young, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

Feb. 14-23 **Primary Care Update** Office of CME, University

of Minnesota Medical School; Hotel Sanur Beach, Bali, INDONESIA. CONTACT: Bart Galle, Office of CME, Radisson Hotel Metrodome, Suite 107, 615 Washington Avenue SE, Minneapolis, MN 55414; 612/626-7600.

Feb. 15 **Family-Centered Approach to Management of Chronic Illness** Naeve Hospital; Albert Lea Technical College, Albert Lea, MN. CONTACT: Dr. Jon Wogensen, Naeve Hospital, 404 Fountain Street, Albert Lea, MN 56007; 507/377-6221.

Feb. 15-22 **HealthEast Winter Medical Seminar** HealthEast; Steamboat Springs, CO. CONTACT: Lisa Harrell, 1700 University Avenue, St. Paul, MN 55104; 612/641-5112.

Feb. 20 **Newer Antibiotics in Our Basic Armamentarium** Group Health Inc.; Minneapolis Metrodome Hilton, Minneapolis, MN. CONTACT: Debbie Bladine, Group Health Inc., 2829 University Avenue SE, Minneapolis, MN 55414; 612/623-8479.

Feb. 21 **Prostate Seed Implantation: A Practical Course** Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME Office, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

Feb. 21-22 **Sexual Attitude Reassessment Seminars (SAR)** Program in Human Sexuality; Holiday Inn Metrodome, Minneapolis, MN. CONTACT: SAR Coordinator or Secretary, Program in Human Sexuality, FMC Building, 1300 South 2nd Street, Minneapolis, MN 55454.

Feb. 21-22 **Hyperlipidemia: New Therapeutic Strategies** Abbott Northwestern Hospital; Radisson Plaza Hotel, Minneapolis, MN. CONTACT: Minneapolis Heart Institute Foundation, 920 East 28th Street, Minneapolis, MN 55407; 612/863-3979.

Feb. 26-27 **Geriatric Drug Therapy Symposium** Office of CME, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of CME, Radisson Hotel Metrodome, Suite 107, 615 Washington Avenue SE, Minneapolis, MN 55414; 612/626-7600.

Feb. 28 **Prevention and Management of Atherosclerotic Diseases** Office of CME, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of CME, Radisson Hotel Metrodome, Suite 107, 615 Washington Avenue SE, Minneapolis, MN 55414; 612/626-7600.

MARCH 1992

March 2-6 **Team Management of Diabetes Mellitus** International Diabetes Center; International Diabetes Center, Minneapolis, MN. CONTACT: Cindy Poppitz, International Diabetes Center, 5000 West 39th Street, Minneapolis, MN 55416; 612/927-3393.

March 3-7 **First Annual Minnesotan-Costa Rican Medical Week: Diagnostic and Therapeutic Frontiers in Medicine** University of Minnesota and Autonomous School of Medical Sciences of Central America; San Jose, Costa Rica. CONTACT: Dr. Hugh D. Westgate, Fairview Ridges Hospital, 201 East Nicollet Blvd., Burnsville, MN 55337; 612/892-2042 or 612/892-2080.

March 5 **Medical Aspects of Drug Abuse—Cocaine** Group Health Inc.; Minneapolis Metrodome Hilton, Minneapolis, MN. CONTACT: Debbie Bladine, Group Health Inc., 2829 University Avenue SE, Minneapolis, MN 55414; 612/623-8479.

March 6 **The Duluth Clinic 1992 Family Practice Conference** The Duluth Clinic; Fitger's Spirit of the North Theatre, Duluth, MN. CONTACT: Rockie Odberg, CME Office, 400 East Third Street, Duluth, MN 55802; 218/725-3838.

March 6-7 **Cutaneous Laser Surgery** Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

March 9-13 **Medical Update 1992** Office of CME, Department of Surgery, University of Minnesota Medical School; Hughes Education and Conference Center, Holy Cross Hospital, Fort Lauderdale, FL. CONTACT: Becky Noren, Office of CME, Radisson Hotel Metrodome, Suite 107, 615 Washington Avenue SE, Minneapolis, MN 55414; 612/626-7600, or 800/888-8642.

March 11-14 **Geriatric Medicine Review** Office of CME, University of Minnesota Medical School; Park Inn International, Minneapolis, MN. CONTACT: Registrar, Office of CME, 615 Washington Avenue SE, Minneapolis, MN 55414; 626-7600.

March 12-13 **Family Practice Today** St. Paul-Ramsey Medical Center; Holiday Inn East, St. Paul, MN. CONTACT: Bonnie Young, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

March 13-18 **Neurology in Clinical Practice** Mayo Clinic/Mayo Foundation; Capiva, FL. CONTACT: Rita Kunz or Jan Fleck, Mayo Clinic, 200 1st Street SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

March 14 **Ob/Gyn Seminar** Group Health Inc.; Minneapolis Metrodome Hilton, Minneapolis, MN. CONTACT: Debbie Bladine, Group Health Inc., 2829 University Avenue SE, Minneapolis, MN 55414; 612/623-8479.

March 16-20 **Team Management of Diabetes Mellitus** International Diabetes Center; International Diabetes Center, Minneapolis, MN. CONTACT: Cindy Poppitz, International Diabetes Center, 5000 West 39th Street, Minneapolis, MN 55416; 612/927-3393.

March 19 **Common Skin Disorders** Group Health Inc.; Minneapolis Metrodome Hilton, Minneapolis, MN. CONTACT: Debbie Bladine, Group Health Inc., 2829 University Avenue SE, Minneapolis, MN 55414; 612/623-8479.

March 20 **Annual Occupational Medicine Update** St. Paul-Ramsey Medical Center; Minneapolis Metrodome Hilton, Minneapolis, MN. CONTACT: Bonnie Young, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

March 20-21 **Advanced Laparoscopic Abdominal Surgery Seminar** Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

March 21-22 **Sexual Attitude Reassessment Seminars (SAR)** Program in Human Sexuality; Holiday Inn Metrodome, Minneapolis, MN. CONTACT: SAR Coordinator or Secretary, Program in Human Sexuality, FMC Building, 1300 South 2nd Street, Minneapolis, MN 55454; 612/625-1500.

March 26-27 **Critical Care: Practical Approaches & Case Discussion** St. Paul-Ramsey Medical Center; Holiday Inn East, St. Paul, MN. CONTACT: Bonnie Young, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

March 27-28 **Lasers in Orthopedic Surgery** Laser Center of Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Laser Center 39102, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-3000.

March 28 **Teen Program Seminar (Pediatric and Mental Health Topics)** Group Health Inc.; Minneapolis Metrodome Hilton, Minneapolis, MN. CONTACT: Debbie Bladine, Group Health Inc., 2829 University Avenue SE, Minneapolis, MN 55414; 612/623-8479.

March 29-April 1 **Management Strategies in Complex Congenital Heart Disease** Mayo Clinic/Mayo Foundation; Phoenix, AZ. CONTACT: Postgraduate Courses, Mayo Clinic/Mayo Foundation, Section of Continuing Education, 200 First Street SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

A P R I L 1 9 9 2

April 2-3 **Allergy and Clinical Immunology** Office of CME, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of CME, Radisson Hotel Metrodome, Suite 107, 615 Washington Avenue SE, Minneapolis, MN 55414; 612/626-7600.

April 2-3 **Annual Obstetrics and Gynecology Update** St. Paul-Ramsey Medical Center; Holiday Inn East, St. Paul, MN. CONTACT: Bonnie Young, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

April 3 **ENT Update** St. Paul-Ramsey Medical Center; St. Joseph's Hospital, St. Paul, MN. CONTACT: Bonnie Young, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

April 6-7 **Annual Ophthalmology Course** Office of CME, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of CME, Radisson Hotel Metrodome, Suite 107, 615

Washington Avenue SE, Minneapolis, MN 55414; 612/626-7600.

April 8-10 **Annual Spring Refresher—Minnesota Academy of Family Physicians** Minnesota Academy of Family Physicians; Hyatt Regency Hotel, Minneapolis, MN. CONTACT: Virginia Barzan, Minnesota Academy of Family Physicians, 2221 University Avenue SE, Minneapolis, MN 55414; 612/331-2506.

April 10-11 **Advanced Laparoscopic Abdominal Surgery Seminar** Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

April 10-11 **Pelviscopic Surgery Including Laparoscopic Hysterectomy** Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Laser Center 39102, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-3000.

April 11 **Treatment of Renal and Ureteral Stones in the '90s** Minnesota Urological Society; St. Paul Hotel, St. Paul, MN. CONTACT: Jennifer Sylrie, Minnesota Medical Association, 2221 University Avenue SE, Suite 400, Minneapolis, MN 55414; 612/378-1875 or 800/999-1875.

April 16 **Spondyloarthropathies** Group Health Inc.; Minneapolis Metrodome Hilton, Minneapolis, MN. CONTACT: Debbie Bladine, Group Health Inc., 2829 University Avenue SE, Minneapolis, MN 55414; 612/623-8479.

April 24-25 **Lasers in Orthopedic Surgery** Laser Center of Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Laser Center 39102, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-3000.

April 24-25 **15th Annual Update in Clinical Cardiology** Abbott Northwestern Hospital; To Be Determined. CONTACT: Minneapolis Heart Institute Foundation, 920 East 28th Street, Minneapolis, MN 55407; 612/863-3979.

April 24-25 **Sexual Attitude Reassessment Seminars (SAR)** Program in Human Sexuality; Holiday Inn Metrodome, Minneapolis, MN. CONTACT: SAR Coordinator or Secretary, Program in Human Sexuality, FMC Building, 1300 South 2nd Street, Minneapolis, MN 55454; 612/625-1500.

April 24-26 **First Annual Mayo Clinic Conference on Advances in Clinical Anesthesiology** Mayo Clinic/Mayo Foundation; Amelia Island Plantation, Amelia Island, FL. CONTACT: Postgraduate Courses, Mayo Clinic/Mayo Foundation, 200 First Street SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

April 27-29 **Bone & Soft Tissue Tumors** Mayo Clinic/Mayo Foundation; Hilton Beach & Tennis Resort, San Diego, CA. CONTACT: Postgraduate Courses, Mayo Clinic/Mayo Foundation, 200 First Avenue SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

April 29 **Orthopedic Challenges in Rheumatology** Abbott Northwestern Hospital; Abbott Northwestern Hospital,

Minneapolis, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

M A Y 1 9 9 2

May 1-2 **Advanced Laparoscopic Abdominal Surgery Seminar** Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

May 2 **Interventional Radiology** Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

May 4-8 **Family Practice Review and Update** Office of CME, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of CME, Radisson Hotel Metrodome, Suite 107, 615 Washington Avenue SE, Minneapolis, MN 55414; 612/626-7600.

May 12 **Gynecology and Gynecologic Oncology** Office of CME, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of CME, Radisson Hotel Metrodome, Suite 107, 615 Washington Avenue SE, Minneapolis, MN 55414; 612/626-7600.

May 13-15 **Current Concepts in Radiation Therapy** Office of CME, University of Minnesota Medical School; Mayo Memorial Auditorium, U of M, Minneapolis, MN. CONTACT: Becky Noren, Office of CME, Radisson Hotel Metrodome, Suite 107, 615 Washington Avenue SE, Minneapolis, MN 55414; 612/626-7600.

May 21 **Adult Survivors of Sexual Abuse in Childhood** Group Health Inc.; Minneapolis Metrodome Hilton, Minneapolis, MN. CONTACT: Debbie Bladine, Group Health Inc., 2829 University Avenue SE, Minneapolis, MN 55414; 612/623-8479.

May 29-30 **Lasers in Orthopedic Surgery** Laser Center of Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Laser Center 39102, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-3000.

J U N E 1 9 9 2

June 5-6 **Clinical Hypnosis Workshops: Advanced and Introductory** Office of CME, University of Minnesota Medical School; Sheraton Midway Hotel, St. Paul, MN. CONTACT: Becky Noren, Office of CME, Radisson Hotel Metrodome, Suite 107, 615 Washington Avenue SE, Minneapolis, MN 55414; 612/626-7600.

June 11-25 **Scandinavia/Russia Air/Sea Cruise** INTRAV; Denmark, Russia, Finland, Sweden, Poland, Norway, Holland. CONTACT: North Central Medical Conference, 1845 Hampshire Avenue, #200, St. Paul, MN 55116; 612/698-1888.

Physician Opportunities and Miscellaneous Listings

Classified rates are 50¢ a word. Minimum monthly charge is \$10; with box number \$2 additional. Ads will not be accepted by phone.

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Bemidji, Minnesota: Excellent opportunities for well-trained physicians. We are seeking BC/BE physicians in family practice and otolaryngology to join a young 33-physician multispecialty group practice located in northern Minnesota. Competitive salary guarantee plus incentive first year and excellent benefits. An excellent opportunity for a physician to enjoy practice in the center of hunting, fishing, and clear air. Please respond with CV to: C.C. Lowery, Administrator, Bemidji Clinic-MeritCare, 1233 34th Street NW, Bemidji, MN 56601; 218/751-1280. (R)

Internist to join a progressive 13-physician group practice. Rural college town 30 miles from St. Paul, Minnesota. New clinic and constructing new hospital. Contact: Robert B. Johnson, M.D., River Falls, WI 54022; 715/425-6701. (*9/91-R)

Urgent Care/Primary Care physicians for over 90 group positions in metropolitan Phoenix/Tucson, Arizona. Excellent compensation/partnership opportunities. Other quality positions nationwide. Send CV or call: Mitch Young (MM), PO Box 1804, Scottsdale, AZ 85252; 602/990-8080. (*1/90-R)

Family Practitioner to join a progressive 13-physician group practice. Rural college town 30 miles from St. Paul, Minnesota. New clinic and constructing new hospital. Contact: Robert B. Johnson, M.D., River Falls, WI 54022; 715/425-6701. (*9/91-R)

Mankato: FP partner to join four board-certified family physicians, ages 34-43, in fast-growing, full-range practice. Ob optional. Population 40,000+. Seventy miles to Twin Cities. Four colleges nearby. Subspecialty consultation readily available on hospital staff. Academic appointment available. Call: Tony Giefer, M.D., 507/387-8231. (8/91-R)

Family Physicians: Well-established south suburban Minneapolis family practice group seeks associates part/full time to staff day clinic. Excellent call schedule, salary, and fringe benefits. Also seeking locum tenens to staff PT/FT Urgent Care Centers and/or day clinic. Contact: Administration, Family Physicians, P.A., 612/435-4125, or send inquiries to Suite 100, 14050 Nicollet Avenue South, Burnsville, MN 55337. (*9/89-R)

Mankato Clinic, Ltd. is seeking BC/BE physicians in the following specialties: dermatology, gastroenterology, invasive cardiology, occupational medicine, oncology/hematology, ophthalmology, pulmonary medicine, family practice, and general internal medicine. The Mankato Clinic is a 50-physician multispecialty group practice in south-central Minnesota with a trade-area population of +250,000. Guaranteed salary first year, incentive thereafter with full range of benefits and liberal time off. For more information call: Roger Greenwald, Administrator, or Dr. B. C. McGregor, 507/625-1811 or 800/657-6944, or write: 501 Holly Lane, Mankato, MN 56001. (12/91-R)

BC/BE Family Practice, Internal Medicine, and Ob/Gyn Physician: Excellent opportunity to join well-established, progressive, 20-physician multispecialty group located in an economically sound community of 20,000 (drawing area of 40,000), 65 miles south of the Twin Cities. Full membership after one year. Competitive salary and fringe benefits package. Contact: Ed Durst, M.D., or Terry Tone, Administrator, 134 Southview, Owatonna, MN 55060; 507/451-1120. (2/92-R)

Forest Lake Doctor's Clinic is seeking a BC/BE family physician, pediatrician, ob/gyn, and internist to join 10-physician multispecialty group. Located 25 miles north of Minneapolis-St. Paul in progressive community with excellent schools, many beautiful lakes, recreational activities, golf, fishing, boating, skiing. Local hospital directly across street. Contact: Dr. Harvey J. Frank or Dr. Doug Sill, 121 SE 11th Avenue, Forest Lake, MN 55025; 612/464-7100. (4/90-R)

MDsearch assists medical groups and hospitals in their recruiting efforts. For confidential information on opportunities in the Upper Midwest, send CV and/or call collect: Mary Jo Cordes, MDsearch, PO Box 21507, St. Paul, MN 55121; 612/454-7291. (12/91-R)

Lake City, Minnesota: Family physician BC/BE needed to join three other FPs in progressive, growing practice on Lake Pepin/Mississippi River in southeastern Minnesota. Excellent first-year salary/benefits in a scenic community with multiple recreational opportunities. Contact: D.D. Pflaum, M.D., 303 South Washington, Lake City, MN; 612/345-3318. (8/90-R)

Olmsted Medical Group is seeking BC/BE physicians in the following specialties: orthopedics, radiology, family practice, emergency medicine, and ob/gyn. Great opportunity for well-trained physicians to join a 55+ physician multispecialty group in a dynamic, progressive practice. In addition to the main office in Rochester, the group operates eight branch offices in southeastern Minnesota. Excellent salary/benefits package includes malpractice insurance, flexible benefits plan, 401(k) and profit sharing, and relocation assistance. Send CV to: Olmsted Medical Group, Attn: Susan Schuett, 210 Ninth Street SE, Rochester, MN 55904. (1/92-R)

Downtown Office Space for Rent: Physician in the Medical Arts Building, 825, wishes to sublet to another physician on a part-time basis for the purpose of sharing overhead expenses. Call: 612/370-0553. (6/90-R)

Wisconsin: 120-physician multispecialty clinic in the Fox River Valley of northeastern Wisconsin desires two BC/BE pediatricians to join department of 15 BC/BE pediatricians. Excellent compensation and benefits package, leading to shareholder status after two years. The community offers a superb recreational, cultural, and family environment in which to practice. For information please call or write: Howard Kidd, M.D., La Salle Clinic, 411 Lincoln Street, Neenah, WI 54956; 414/727-4276. (3/91-R)

Family Physician wanted to join three board-certified M.D.s in well-established, expanding group practice. Weekend ER coverage. No buy-in. Financial package hard to beat. Enjoy a progressive, rural city within easy reach of St. Cloud and Minneapolis. Contact: Dr. Jim Mohs, Melrose Clinic, 603 West Main Street, Melrose, MN 56352; office, 612/256-4228; home, 612/256-3488. (4/91-R)

Physician: BC in emergency medicine, experienced in FP (no ob), and licensed in Minnesota, South Dakota, Wisconsin, available for locum tenens coverage. Reply to: Minnesota Medicine (850), 2221 University Avenue SE, Suite 400, Minneapolis, MN 55414. (5/91-R)

Internal Medicine, Pediatrics, and Dermatology practice opportunities available at the Faribault Clinic. The Faribault Clinic is a multispecialty group practice of 19 physicians. Faribault is located 50 miles south of Minneapolis on I-35. For more information contact: Ray W. Wood, M.D., or Ken Smith, Administrator, 924 NE First Street, Faribault, MN 55021; 507/334-3921. (4/90-R)

Stillwater: Multispecialty group with emphasis on primary care seeking BC/BE family physician, pediatrician, and

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internist. Scenic location with excellent school system, supportive medical community with strong local hospital, competitive salary and benefits. Send CV to: Jon Petersen, St. Croix Valley Clinic, 921 Greeley, Stillwater, MN 55082; 612/439-2215. (12/92-R)

Family Physician wanted to join five-physician, two-P.A., two-site family practice group in St. Anthony and Shoreview. Ob available. Competitive salary, benefits package, and call schedule. Contact: Gerald Pitzl, M.D., Silver Lake Clinic PA, 612/788-9251. (7/91-R)

General Surgeon: Five-man family practice group seeks surgeon. Only clinic in city of 8,000, one hour from Minneapolis. Position should generate adequate salary and lots of family time. Write: Minnesota Medicine (853), 2221 University Avenue SE, Suite 400, Minneapolis, MN 55414. (8/91-R)

Wadena, Minnesota: Beautiful central Minnesota is home to the Wadena Medical Center, a five-physician group, and Tri-County Hospital. A scenic three-hour drive from Minneapolis. Family physicians to do obstetrics. Contact Dr. Matt Yelle, 218/631-1360, or Jim Lawson, Administrator, 218/631-3510. You'll not want to pass up this attractive place and offer. (8/91-R)

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Family Physician/Internist: Regional treatment center interested in two full-time, BC/BE family practitioners/internists. Forty hours/week. Competitive salary and benefits. Live in the exciting Brainerd lakes area. Send CV to: Chief of Medicine, Brainerd Regional Human Services Center, 1777 Highway 18 East, Brainerd, MN 56401. 6-4/92

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Internist to join two internists in active practice in scenic upper Michigan. Medical school affiliation. Contact: North Shore Internal Medicine, 2420 First Avenue South, Escanaba, MI 49829; 906/786-1563. (*11/91-R)

Mora, Minnesota—Family Physician needed to join a seven-member FP group. We are a well-established, expanding practice and offer competitive salary and benefits package with partnership available. We have JCAHCO-accredited hospital, on-site consultations from numerous specialty disciplines, satellite offices located in Pine City and Hinckley. Mora is a progressive community located 65 miles north of the Twin Cities with an excellent school system and many cultural and recreational opportunities within easy access. Contact: Larry J. Brettingen, M.D., 224 Seventh Street, Mora, MN 55051; 612/679-1340. 6-5/92

General Surgeon: Join established lucrative practice serving two excellent hospitals and two-county population of 35,000. Peaceful, scenic city of 8,500. Excellent housing, school system, shopping, and progressive medical staff. Send CV to: Jim Schneckloth, 4 Sunset Place, Charles City, IA 50616. 3-2/92

Family Practice: Fine opportunity for growing and lucrative group practice. Progressive medical staff serves 61-bed hospital and county population of 19,000. Peaceful, scenic city of 8,500 with excellent housing, schools, shopping, hunting, sports, and wide range of community and hospital/health services. Send CV to: Jim Schneckloth, 4 Sunset Place, Charles City, IA 50616. 3-2/92

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BC/BE Pediatrician to join group of six within 70-physician multispecialty clinic. This growing and diverse practice offers a competitive salary plus incentive, insurance, benefits, excellent hospitals, schools, colleges, and cultural and recreational activities in town of 60,000. Practice serves a tri-state area of 225,000 population. Send CV to: Denis P. Albright, Director of Physician Recruiting, Medical Associates Clinic, P.C., 1000 Langworthy, Dubuque, IA 52001; or call 319/589-9981. *3-2/92

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Alexandria Clinic, P.A.
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Alexandria, MN 56308
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staffed office, very competitive guaranteed salary, and comprehensive benefits package. For information on this and other opportunities in the Upper Midwest, contact and send CV to: Mary Jo Cordes, President, MDsearch, PO Box 21507, St. Paul, MN 55121; or call: 612/454-7291. Fax: 612/454-7277. *4-3/92

Orthopedic Surgeon, Minneapolis: BC/BE orthopedic surgeon needed to join the Department of Orthopedic Surgery of a 340-physician multispecialty medical clinic in desirable Twin Cities area. Our medical clinic is a highly reputable, well-established clinic that has been in existence for over 40 years. Teaching and clinical research are encouraged, and salary and benefits are highly competitive. Send CV and letters of inquiry to: Patrick Moylan, Park Nicollet Medical Center, 5000 West 39th Street, Minneapolis, MN 55416. 2-2/92

Medical Ophthalmologist needed to join a 340-physician, multispecialty medical clinic in the attractive Minneapolis-St. Paul area. Full or part time will be considered. Send CV and letter of inquiry to: J. Timothy Diegel, M.D., Chairman, Ophthalmology, Park Nicollet Medical Center, 5000 West 39th Street, Minneapolis, MN 55416; 612/569-4830. 2-2/92

Oshkosh, Wisconsin: Single-specialty groups are recruiting in family practice, pediatrics, ob/gyn, and cardiology. Oshkosh is an attractive community of 55,000 people, located on the shores of Lake Winnebago and in the heart of Wisconsin's beautiful Fox River Valley. Competitive financial packages. Contact: Christopher Kashnig, Physician Recruiter, Mercy Medical Center, 631 Hazel Street, Oshkosh, WI 54902; or call: 800/242-5650, Ext. 2430, or 414/236-2430. *3-3/92

Family Practice—Minnesota: Enjoy the benefits of country living yet have the resources of a major metropolitan area close at hand. Health One Buffalo Hospital is seeking a family physician to join two FPs and a nurse practitioner in its clinics in Annandale and Winsted. Share call with five physicians. Competitive compensation with excellent benefits including year-round outdoor recreation in "the heart of the lakes." Contact: Kim Isenberg, Health One Buffalo Hospital, 303 Catlin Street, PO Box 609, Buffalo, MN 55313; 612/682-1212, Ext. 245. 6-6/92

Wisconsin—Internist Wanted: Group Health Cooperative, a progressive, growing, staff-model HMO in a city of 60,000 in west-central Wisconsin, is currently recruiting a third internist. Very competitive salary with excellent fringe benefits. Practice high-quality internal medicine in a most desirable location. Please contact: Stuart R. Lancer, M.D., M.B.A., Medical Director, Group Health Cooperative, PO Box 3217, Eau Claire, WI 54702-3217; 715/836-8552. *3-3/92

Wisconsin—Fourth BC/BE Obstetrician/Gynecologist needed to join stable, progressive, primary-care-based HMO/group practice in university town of 60,000 near Minneapolis.

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olis/St. Paul. Excellent quality of life and outstanding recreational area. Competitive salary and fringe benefits. Contact: Stuart R. Lancer, M.D., M.B.A., Medical Director, Group Health Cooperative, PO Box 3217, Eau Claire, WI 54702-3217; 715/836-8552. *3-3/92

Wisconsin—Family Practitioner Needed by progressive and growing group practice in west-central Wisconsin city of 60,000. Ninety miles from Minneapolis/St. Paul. Primarily prepaid practice with large component FFS. Highly competitive salary with excellent fringe benefits. Practice high-quality care in a good recreational area. Send CV to: Stuart R. Lancer, M.D., M.B.A., PO Box 3217, Eau Claire, WI 54702-3217; 715/836-8552. *3-3/92

One or Two Family Practice Physicians to join five family practitioners. Population 8,000. One hour south of Burnsville Center. Lakes, industry, negotiable salary. Clinic adjacent to hospital. Ample free time to enjoy family life. Contact James W. Dey, M.D., or Ruth Hawker, Clinic Manager, 501 North State Street, Waseca, MN 56093; 507/835-3110. (2/92-R)

Orthopedic Surgeons needed for several Midwest practices. Choose from solo with shared call and medical draw of 60,000, two-way call in family community with medical

draw of 160,000, partnership in waterfront community with outstanding potential, or group with four-way call just 45 minutes from metro area. Interest in sports medicine a plus for several of these opportunities. For more information, mail CV or call Bill Sherriff at 800/533-0525; Sherriff & Associates, 10983 Granada, Suite 202, Overland Park, Kansas 66211. *1-2/92

Pediatrician: BC/BE pediatrician needed for hospital-sponsored clinic in Midwest metro location with medical draw of 1 million. Opportunity offers practice management, six-way call, negotiable guarantee, and optional academics in a community with top-rated public schools, colleges, museums, symphony, water recreation, and first-class affordable housing. Potential first-year income of \$150,000+. For more information, mail CV or call Barb Inselman at 800/533-0525; Sherriff & Associates, 10983 Granada, Suite 202, Overland Park, Kansas 66211. *1-2/92

The Monticello Clinic: Well-established multispecialty clinic adjacent to 39-bed acute-care/91-bed long-term care facility in a rural setting seeking a BC/BE family practitioner. Ideal location to raise a family. Thirty miles from large metropolitan area. Year-round cultural and recreational activities. Excellent salary guarantee, production incentive,



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and benefits package. For more information, contact: Penny M. Vail, Director, Clinic Services, North Memorial Medical Center, 3300 Oakdale North—3E Perinatal, Minneapolis, MN 55422; 612/520-4839. 3-4/92

Northbrook Clinic: Special opportunity for BC/BE family practitioner to join a well-established, three-physician clinic. This practice will be moving in 1992 to a new facility. This northern suburb offers a safe family environment and outstanding educational, cultural, and recreational amenities. Excellent salary guarantee, production incentive, and benefits package. For more information, contact: Penny M. Vail, Director, Clinic Services, North Memorial Medical Center, 3300 Oakdale North—3E Perinatal, Minneapolis, MN 55422; 612/520-4839. 3-4/92

Wayzata Family Physicians: Special opportunity for BC/BE family practitioner to join a well-established, five-physician practice located in a prime suburb community near beautiful Lake Minnetonka. The area is surrounded by top-quality schools, shopping centers, and an abundance of recreational, family, and social activities. Excellent salary guarantee, production incentive, and benefits package. For more information, contact: Penny M. Vail, Director, Clinic Services, North Memorial Medical Center, 3300 Oakdale North—3E Perinatal, Minneapolis, MN 55422; 612/520-4839. 3-4/92

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Family Practice: Physicians seeking a BC/BE family practice physician for the Norway, Michigan, service area. The physician would have the option of joining one of the existing practices and/or setting up his/her own practice. Anderson Memorial Hospital is a part of Dickinson County Hospitals and has a service-area population of over 45,000.

Contact: Dr. Paul Hayes' office, 906/563-9255, or Dr. William Gladstone's home, 906/563-8743. Anderson Memorial Hospital, Main Street, Norway, MI 49870; 906/563-9243. *1-2/92

Family Practice: BC/BE family practitioner to join 21-person family practice department that is part of a 45-person multispecialty group located in the northern suburbs of Minneapolis. Practice opportunities available in rural and suburban locations. Highly competitive first-year guaranteed salary, production-based compensation, exceptional benefits package. Respond with CV to: Penny Magnuson, M.D., 9055 Springbrook Drive, Coon Rapids, MN 55433; 612/780-9155. *1-2/92

Administrative Services: Medical wordprocessing and administrative work. Minimum one-year contract—\$10,000. Call Janice S., 612/776-2699. *1-2/92

For Sale: 3½-year-old disc computer system. Contact Wanda DuCharme, M.D., 507/433-7351. *1-2/92

Position Available for Family Physician in Suburban St. Paul: Exceptional opportunity exists to join our clinic of three family physicians, three internists, and one pediatrician. The practice combines the satisfaction and independence of a small practice with the many benefits of an affiliation with a larger multispecialty group. Comfortable and pleasant working conditions and an excellent benefits package. Part- or full-time positions are available. Please contact Karen Steiner, M.D., Ramsey Clinic Maplewood, 1774 Cope Avenue, Maplewood, MN 55109; 612/770-1497. Equal Opportunity Employer. *2-3/92

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Contraindications: Severe LV dysfunction (see *Warnings*), hypotension (systolic pressure < 90 mm Hg) or cardiogenic shock, sick sinus syndrome (if no pacemaker is present), 2nd- or 3rd-degree AV block (if no pacemaker is present), atrial flutter/fibrillation with an accessory bypass tract (eg, WPW or LGL syndromes), hypersensitivity to verapamil.

Warnings: Verapamil should be avoided in patients with severe LV dysfunction (eg, ejection fraction < 30%) or moderate to severe symptoms of cardiac failure and in patients with any degree of ventricular dysfunction if they are receiving a beta-blocker. Control milder heart failure with optimum digitalization and/or diuretics before Calan SR is used. Verapamil may occasionally produce hypotension. Elevations of liver enzymes have been reported. Several cases have been demonstrated to be produced by verapamil. Periodic monitoring of liver function in patients on verapamil is prudent. Some patients with paroxysmal and/or chronic atrial flutter/fibrillation and an accessory AV pathway (eg, WPW or LGL syndromes) have developed an increased antegrade conduction across the accessory pathway bypassing the AV node, producing a very rapid ventricular response or ventricular fibrillation after receiving I.V. verapamil (or digitalis). Because of this risk, oral verapamil is contraindicated in such patients. AV block may occur (2nd- and 3rd-degree, 0.8%). Development of marked 1st-degree block or progression to 2nd- or 3rd-degree block requires reduction in dosage or, rarely, discontinuation and institution of appropriate therapy. Sinus bradycardia, 2nd-degree AV block, sinus arrest, pulmonary edema and/or severe hypotension were seen in some critically ill patients with hypertrophic cardiomyopathy who were treated with verapamil.

Precautions: Verapamil should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) or impaired renal function, and patients should be monitored for abnormal prolongation of the PR interval or other signs of overdosage. Verapamil may decrease neuromuscular transmission in patients with Duchenne's muscular dystrophy and may prolong recovery from the neuromuscular blocking agent vecuronium. It may be necessary to decrease verapamil dosage in patients with attenuated neuromuscular transmission. Combined therapy with beta-adrenergic blockers and verapamil may result in additive negative effects on heart rate, atrioventricular conduction and/or cardiac contractility; there have been reports of excessive bradycardia and AV block, including complete heart block. The risks of such combined therapy may outweigh the benefits. The combination should be used only with caution and close monitoring. Decreased metoprolol and propranolol clearance may occur when either drug is administered concomitantly with verapamil. A variable effect has been seen with combined use of atenolol. Chronic verapamil treatment can increase serum digoxin levels by 50% to 75% during the first week of therapy, which can result in digitalis toxicity. In patients with hepatic cirrhosis, verapamil may reduce total body clearance and extrarenal clearance of digoxin. The digoxin dose should be reduced when verapamil is given, and the patient carefully monitored. Verapamil will usually have an additive effect in patients receiving blood-pressure-lowering agents. Disopyramide should not be given within 48 hours before or 24 hours after verapamil administration. Concomitant use of flecainide and verapamil may have additive effects on myocardial contractility, AV conduction, and repolarization. Combined verapamil and quinidine therapy in patients with hypertrophic cardiomyopathy should be avoided, since significant hypotension may result. Concomitant use of lithium and verapamil may result in a lowering of serum lithium levels or increased sensitivity to lithium. Patients receiving both drugs must be monitored carefully. Verapamil may increase carbamazepine concentrations during combined use. Rifampin may reduce verapamil bioavailability. Phenobarbital may increase verapamil clearance. Verapamil may increase serum levels of cyclosporin. Verapamil may inhibit the clearance and increase the plasma levels of theophylline. Concomitant use of inhalation anesthetics and calcium antagonists needs careful titration to avoid excessive cardiovascular depression. Verapamil may potentiate the activity of neuromuscular blocking agents (curare-like and depolarizing); dosage reduction may be required. There was no evidence of a carcinogenic potential of verapamil administered to rats for 2 years. A study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. Pregnancy Category C. There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor, and delivery only if clearly needed. Verapamil is excreted in breast milk; therefore, nursing should be discontinued during verapamil use.

Adverse Reactions: Constipation (7.3%), dizziness (3.3%), nausea (2.7%), hypotension (2.5%), headache (2.2%), edema (1.9%), CHF, pulmonary edema (1.8%), fatigue (1.7%), dyspnea (1.4%), bradycardia: HR < 50/min (1.4%), AV block: total 1°/2°/3° (1.2%), 2° and 3° (0.8%), rash (1.2%), flushing (0.6%), elevated liver enzymes, reversible non-obstructive paralytic ileus. The following reactions, reported in 1.0% or less of patients, occurred under conditions where a causal relationship is uncertain: angina pectoris, atrioventricular dissociation, chest pain, claudication, myocardial infarction, palpitations, purpura (vasculitis), syncope, diarrhea, dry mouth, gastrointestinal distress, gingival hyperplasia, ecchymosis or bruising, cerebrovascular accident, confusion, equilibrium disorders, insomnia, muscle cramps, paresthesia, psychotic symptoms, shakiness, somnolence, arthralgia and rash, exanthema, hair loss, hyperkeratosis, macules, sweating, urticaria, Stevens-Johnson syndrome, erythema multiforme, blurred vision, gynecomastia, galactorrhea/hyperprolactinemia, increased urination, spotty menstruation, impotence.

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FACE TO FACE

Health Care for New Americans: Blending Traditional and Western Medicine

Minnesota Medicine interviews Patricia F. Walker, M.D., director of St. Paul-Ramsey's International Clinic

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COVER

Refugee health care has challenged Minnesota physicians since the first large wave of Southeast Asian immigrants entered the state in the mid-1970s. As this month's interview and cover story describe, refugees in need of medical care face many obstacles, but physicians are learning to meet their needs—expanding their own understanding of medicine at the same time.

Photo of Mao Vang and daughter Pa Nhia Xiong at a visit to the Family Medical Center in Minneapolis by Douglas Clement.

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Health One Office of Medical Education and Research

Selected 1992 Seminars

- February**
10 & 11 Advanced trauma Life Support (ATLS) - 7:30 a.m. - 5:00 p.m. - United/Children's Conference Center - Lab at St. Paul Ramsey Medical Center.
- March**
10 & 11 Trauma Nursing Core Course (TNCC) - 7:30 a.m. - 5:00 p.m. - Health One Unity Hospital.
- April**
27 & 28 Advanced trauma Life Support (ATLS) - 7:30 a.m. - 5:00 p.m. - United/Children's Conference Center - Lab at St. Paul Ramsey Medical Center.
- May**
11 Emergency Medicine Seminar for Nurses/Paramedics - 8:00 a.m. - 4:00 p.m. Earle Brown Heritage Center, Brooklyn Center.
- 22 & 23 Advanced Life Support Obstetrics (ALSO) - Earle Brown Heritage Center, Brooklyn Center 7:30 a.m. - 5:30 p.m.
- September**
10 & 11 Second Annual Children's Hospital of St. Paul CME Course - 8:00 a.m. - 5:00 p.m. - United/Children's Hospital Conference Center.
- October**
2 & 3 Neurological Seminar - Epilepsy - 8:00 a.m. - 4:30 p.m. United/Children's Conference Center.
- 9 Current Clinical Cardiology For Physicians and the Eleventh Annual Jesse E. Edwards, M.D. Lecture - 8:00 a.m. - 6:00 p.m. - United/Children's Conference Center.
- 19 & 20 Advanced trauma Life Support (ATLS) - 7:30 a.m. - 5:00 p.m. - United/Children's Conference Center - Lab at St. Paul Ramsey Medical Center.
- 23 & 24 Fifth Annual New Ulm Fall Seminar, Holiday Inn New Ulm.
- November**
7 Fourth Annual Oncology Conference Radisson Ridgedale 8:00 a.m. - 4:30 p.m.

Educational Telephone Network 1992 Scheduled Events

- February**
18 "Diagnosis and Management of Anemias in Children" - Christopher Moertel, MD, Health One Unity Hospital.
- March**
3 "Antibiotic Associated Colitis" - Robert Raszowski, MD, University of South Dakota.
- 17 "Biology and Therapy of Childhood Asthma" - Paul Kubic, MD, Children's Hospital St. Paul
- 31 "Prostatic Specific Antigen: Diagnostic Value" - Robert Geist, MD, Leslie Rainwater, MD, United Hospital St. Paul.
- April**
7 "Newer Antibiotic Trends" - Al Heaton, Pharm.D., United Hospital St. Paul.
- 21 "New Proposals for Health Care Reform" - Steven Miles, MD, HCMC.

Fall Schedule For Educational Telephone Network

September 8 & 22
October 6 & 20
November 3 & 17
December 1

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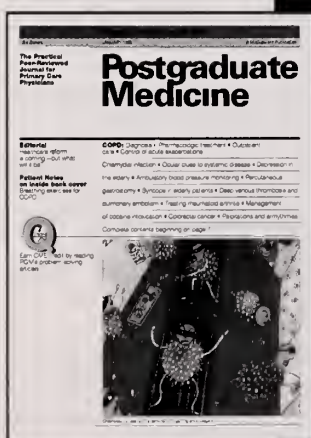
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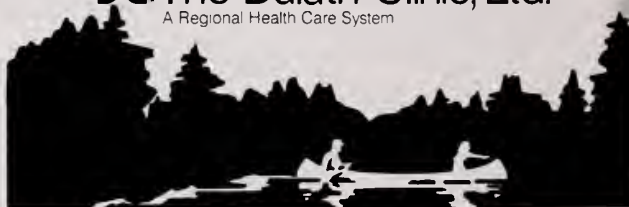
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Professional Perfidy, or Whatever Happened to Conscience?

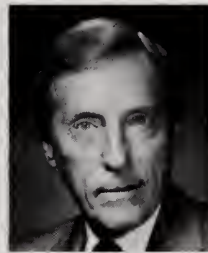
Edmund C. Burke, M.D.

Doctors involved in Medicaid fraud. Young physicians refusing to honor contractual commitments. Whatever happened to conscience? Perhaps I am oversensitive, but these abuses raise my professional anger to the boiling point.

Some young physicians are refusing to honor commitments to serve in rural areas in exchange for the financing of their medical education. How shocking that some medical students accept financial assistance and then refuse to serve the terms of their contracts.

Neither the MMA nor the AMA has taken a stand on this perfidy. I believe it is time we consider establishing penalties, such as withholding licensure or denying hospital privileges, to ensure that these fledgling professionals honor their responsibilities. By not doing so, we condone these actions. I suggest that the AMA Medical Student Section, as well as resident and other young physicians, deal with this matter at the AMA House of Delegates meeting in June.

This problem could possibly be eliminated, or at least diminished, if Congress extended the deferment time on medical student loans. However, a bill in the U.S. Senate (S.1150) proposes that resident physician deferments be *eliminated* as of 1993. The AMA is urging Congress at least to continue the currently allowed deferment time of three years during residency, or, preferably, to expand deferment until completion of residency, which can last anywhere from three to six years. The AMA is also calling on Congress to support the continuation of the forbearance of resident physician loans for a full 10-year period without regard to resident income. I encourage you to



“Medicaid fraud and contractual abuses tarnish our professional image.”

support these measures.

Physicians must also confront Medicaid fraud. Although their numbers are believed to be small, more seasoned members of our profession have been convicted of such fraud, which is not only a breach of professional ethics, but is also criminal behavior. In the December 18 *Journal of the American Medical Association*, Paul Jesilow, Ph.D., and co-authors report on physician violations of Medicaid laws and regulations. They located background information on 138 of the 147 physicians sanctioned for Medicaid fraud from 1977 to 1982, and they interviewed 42 of these physicians. Perhaps the most disturbing aspect of their findings is that these crooked docs would not acknowledge they had done anything wrong. They blamed the bureaucratic and burdensome Medicaid system as a justification for their actions. Do some physicians believe it is justifiable to use any means to improve their lot?

In an accompanying editorial,

AMA Executive Vice President James Todd, M.D., commented pointedly, “Whatever their mentality, whatever their justification, it is wrong.” Although he emphasizes that these physicians do not represent the mainstream of American medicine, he states, “The sort of behavior detailed by Jesilow et al. is a blot on the entire profession.” Like Todd, I find it frightening to think that the public might ascribe such behaviors to the entire medical profession.

No one knows just how many physicians partake in such illegal action, but, of course, we’d like to assume the numbers are small. Nonetheless, the costs of Medicaid fraud are estimated to be high. Jesilow says estimates usually fall around 10 percent to 25 percent of the total program cost, which was expected to exceed \$66 billion for 1991. Apparently, it is time to emphasize the importance of professional values.

In his editorial, Todd writes, “The American Medical Association and its members are rededicating themselves to the principles of professionalism—principles that stress honesty, competence, and self-regulation.”

Medicaid fraud and contractual abuses place physicians under scrutiny and tarnish our professional image. As physicians, we have been accorded special privileges in society, and those privileges involve certain responsibilities and duties that we must uphold. As Todd writes, “More than most, the medical profession, because of its unique role and the consequences of base behavior, has traditionally striven to instill in its practitioners a strong sense of duty and professionalism.” Now, more than ever, physicians must rise to the professional status society has accorded them.

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"I have never gotten used to people dying. And I don't want to get used to it."

Dr. Aliza Lifshitz, Internist, Los Angeles, California, Member, American Medical Association

Patients come to physicians for many reasons. Beyond relief from pain, they seek compassion, empathy and support. AIDS patients receive all of these and more from Dr. Aliza Lifshitz.

Born and raised in Mexico and educated at one of Mexico City's finest medical schools, Dr. Lifshitz now serves the Hispanic community in Southern California. Over a third of her patients have tested HIV positive. Most live below the poverty level. Many are illegal aliens.

"I never forget what it means to be a doctor, and what it means is embodied in the Principles of Medical

Ethics of the American Medical Association (AMA)," states Dr. Lifshitz.

You are invited to join Dr. Lifshitz and to join with her in her efforts to bring quality health care to those in need. Become a member of the American Medical Association today.

Members of the AMA are encouraged to join their state, county and specialty societies.

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Healing Spirit Finds New Home

I thought your readers would be interested in the sculpture entitled "Healing Spirit" by Georgette Sosin as a follow-up to your December cover story about the closing of Metropolitan-Mount Sinai Medical Center. The sculpture, which was mentioned in your article, was originally commissioned by the Mount Sinai Auxiliary and graced the western wall of Mount Sinai Hospital from 1980 to 1990. After the merger with Metropolitan Medical Center, the sculpture was moved to the combined Metropolitan-Mount Sinai Medical Center. When M-MSMC closed in 1991, the sculpture was moved again to Abbott Northwestern, where, it is hoped, the sculpture has found a permanent home.

Sosin was inspired by the passage in Jeremiah 13:17, "For I will restore health to you, and your wounds I will heal," says the Lord." She was also inspired by the Hebrew expression, "Refua Schlema," which means perfect healing of mind, body, and spirit. The figure at the lower end of the sculpture is the Hebrew letter Shin, which symbolizes the presence of God. The intertwining elements rising from the letter represent the interactions of mind, body, and spirit. Sosin expressed the wish that the sculpture should be "a blessing to all who enter here."

The symbolism of this statue and its migrations is meaningful, particularly to the members of the former Mount Sinai medical staff who have now found a pleasant, and, it is hoped, permanent, home at Abbott Northwestern.

David A. Berman, M.D.
Cardiovascular Diseases
Doctors Diagnostic Center, Ltd.
Minneapolis, Minnesota



"Healing Spirit" at Abbott Northwestern. Photo by David Berman.

The Effects of a Walking Program on a Nursing Home Population

We at the Parkview Care Center, a long-term care facility in Buffalo, Minnesota, evaluated the effects of a vigorous walk program on certain musculoskeletal and cardiovascular parameters. Despite growing emphasis on rehabilitation in the nursing home, it is still very apparent that nursing home residents as a group are an ill population. The Parkview Care Center has always had a resident walk program, and, as at many facilities, many of our residents refuse to participate.

From February 1, 1990, until November 30, 1990, we studied the effects of a vigorous walk program on pulse, blood pressure, and lower-extremity range of motion. The program resulted in an increase in total resident walks per month, enhanced self-esteem with improved ability to perform activities of daily living, and increased motivation for both residents and staff. Unfortunately, no statistical benefit was apparent in either range of motion or

cardiovascular measurements. A few individuals showed improvement in hip flexor and/or heel cord (ankle) range of motion. We attributed these improvements to an increase in these patients' motivation and an increase in the attention given these people, who were at a stage in their rehabilitation where they responded to therapy.

Despite the impetus to ensure appropriate rehabilitation in the nursing home population, it is important for all of us to realize that many of these people are, indeed, ill. A good portion of the nursing home population is not amenable to rehabilitation. Our study supports the concept that the importance of nursing home care is to provide a homey, supportive environment where socialization is possible and people are able to reach their fullest potential. We should do what we can to improve or maintain their quality of life, but we should not have unrealistic expectations.

Robert G. Milligan, M.D.,
F.A.A.F.P.
Medical Director
Parkview Care Center
and Clinical Instructor
Department of Family Practice
University of Minnesota

HCMC Stymied in Efforts to Treat Medical Assistance Patients

After reading Dr. Alec Janes' letter in the December *Minnesota Medicine*, which voiced alarm that Hennepin and Ramsey county hospitals in the last six to eight months have been refusing to take AFDC/PHP patients, I realize there is a large misunderstanding, even

among physicians, about the total revamping of health care for the poor in Hennepin County as of July 1990. Beginning then and continuing monthly for the ensuing year, all AFDC recipients in Hennepin County either chose or were arbitrarily assigned to receive all their health care in one of three managed care settings: physicians and hospitals recognized by PHP (now Medica); the physicians and facilities of Hennepin County Medical Center, known as Metropolitan Health Plan (MHP); or physicians and facilities served by the family practice residencies of the University of Minnesota, known as U-Care. Each of these managed care settings is exclusive of the others unless an emergency exists. As a result of the final assignment of AFDC recipients in Hennepin County, only 30 percent of welfare patients may be admitted to Hennepin County Medical Center. Sixty percent of AFDC recipients may be admitted only to Medica hospitals. Although Medica authorizes admission of its non-welfare patients to HCMC, it does not allow its welfare patients to utilize our facility. Several times a week, a patient is taken by ambulance from our emergency room and dropped at another private hospital that is a Medica-approved provider because the patient did not realize that his or her AFDC benefits do not allow access to Hennepin County Medical Center.

As the director of high-risk obstetrics and an active participant in HCMC's resident and medical student teaching programs, I have serious concerns about the implications of managed care on the health care provided to pregnant women in Hennepin County. Social services, language interpretive services, and centralized, coordinated care are available to poor patients at our county facility that simply are not present in private practice settings. We now offer

same-day access to prenatal care for women who call in because they think they may be pregnant and want to start seeing a physician. No longer do they face the three- or six-week wait for a new ob appointment; no longer must they wait until a particular welfare card or documentation is received. We offer the Ob Express Clinic, with the aim of seeing patients within 15 minutes for routine obstetric care. We have full-time Hmong, Lao, Cambodian, Vietnamese, Spanish, and other interpreters, as well as a WIC office on site, and a full-time chemical dependency social worker whose sole responsibility is to assist patients using obstetrics services. Yet, we can only offer these services to the 30 percent of indigent women in Hennepin County who are assigned to the MHP managed care option. We would welcome many more pregnant women, but until and unless the Department of Human Services allows patients to be admitted to our hospital for obstetric care, this is not possible.

Many physicians in the private sector resent being inundated with AFDC/Medica patients for whom they do not have adequate social services and office time; meanwhile, our teaching programs are seeing a fall-off in patients who are best served in our tertiary and centralized center. Dr. Janes, I would welcome any and all of these mothers in a moment, but they are currently in ambulances on the way to your hospital since they are not allowed to be admitted to mine.

*Virginia R. Lupo, M.D.
Director, Maternal-Fetal Medicine
Hennepin County Medical Center
Minneapolis, Minnesota*

Bylaws Analysis Service Available at Lower Cost

As you may know, California Medical Association (CMA) attorneys review medical staff bylaws both for California medical staffs and medical staffs in other

states. This service has been extremely popular both in California and other states. The cost for the analysis to California dues-paying medical staffs is \$2,000; for out-of-state medical staffs, we have been charging \$5,000.

While some medical staffs have been able to pay the out-of-state fee, others have stated that, although they desperately need a review of their medical staff bylaws from a medical staff attorney (as opposed to a hospital-oriented attorney), they simply cannot pay \$5,000. Because of the number of complaints of this nature and the increasing efficiency of our review service, we have decided to reduce this fee to \$3,000. As you know, for a complete review of a set of medical staff bylaws, this fee is a bargain.

Out-of-state bylaws analyses include review for compliance with the Health Care Quality Improvement Act, the Joint Commission Manual, and general principles of medical staff self-governance. State law will not be discussed. Moreover, CMA does not negotiate bylaws. The service is an adjunct to a medical staff attorney, not a replacement for one.

We would appreciate it if you would inform interested medical staffs that they may send their bylaws for review to Bylaws Analysis, California Medical Association, P.O. Box 7690, San Francisco, CA 94120-7690.

*Aynah Askanas
Legal Counsel
California Medical Association
San Francisco, California*

Correction

Our February cover story, "Family Violence Intervention: Physicians Find It's More Than Treating Injuries" (page 19), quoted David Moen, M.D., who is a physician at Riverside Medical Center in Minneapolis, not Fairview Southdale Hospital, as stated in the story.

Health Care for New Americans

Blending Traditional and Western Medicine

Minnesota Medicine interviews Patricia F. Walker, M.D.

Patricia Walker, M.D., first learned of cultural diversity while growing up in Southeast Asia. Today, diversity is part of her everyday life as medical director of St. Paul-Ramsey's International Clinic, where she cares for patients from varied cultures, often in their own language. Fluent in Thai and able to speak Lao and Cambodian, Dr. Walker is known in the Southeast Asian community as "the doctor who speaks."

Dr. Walker first began treating Southeast Asian refugees during her third year of medical school at Mayo, when she traveled to the Thai-Cambodian border to work with the American Refugee Committee. From the start, Dr. Walker was amazed at the refugees' ability to remain hopeful and optimistic through unimaginable suffering. "They have made me feel how incredibly resilient the human spirit is and helped me ... put my own struggles into perspective," she said in a recent news article.

Dr. Walker's care for refugees has extended beyond medical care; she has sponsored five refugees and has helped hundreds get out of camps or settle in the United States. Three Cambodian siblings now live with her, including 25-year-old Monorom Hang, whom Dr. Walker first met while working on the Thai-Cambodian border. At age 10, Hang lost his mother in a frantic crowd while fleeing Cambodia, and he later learned that both his parents died. Recently, he and his brother were reunited with their 16-year-old sister, whom they hadn't seen since she was two days old.

Dr. Walker, regarded as an expert on medical care and politics in Southeast Asia, is also a respected lecturer and consultant and frequently discusses Western health care with Southeast Asian groups. She stresses, and continually demonstrates, that international patients can successfully blend traditional health care methods with Western medicine. She believes that before patients from other cultures will begin to accept Western health care practices, their physicians must learn to understand their diverse beliefs and medical practices and encourage them to continue using traditional healing methods.

Minnesota Medicine: Dr. Walker, please tell us a little about your background and how you became interested in refugee health care.

Walker: I was born and raised in Southeast Asia. I was born in Taipei, Taiwan, and lived there until I was five, when my family moved to Bangkok, Thailand. At the time, my father was the chief pilot for Air America during the Vietnam War and was working primarily in Laos with the Hmong people. The Hmong acted as the CIA's secret army in Laos during the Vietnam War, and Air America was their support airline. My father was based in Bangkok but worked all over Southeast Asia. My siblings and I grew up in Bangkok and Vientiane, Laos.



Patricia F. Walker, M.D.

"If I encourage patients to continue seeing a traditional healer, they also come back to me for health care."

Minnesota Medicine: Did you learn to speak Thai?

Walker: Actually, my first language was Chinese, but when I subsequently moved to Thailand, I forgot most of my Chinese and picked up Thai. I now speak Thai and some Lao and Cambodian. I learned Cambodian in 1987 and 1988 when I was working on the Thai-Cambodian border.

Minnesota Medicine: When did you move to the United States?

Walker: My parents divorced when I was 11 years old, and my mother's family is from Minnesota—she's a Minnesota Swede—so my brother and sisters and I moved back to the United States with her. I continued my education in the United States and went to Gustavus Adolphus College and then to Mayo Medical School and Mayo Graduate School of Medicine. I oftentimes wonder whether I would have pursued medicine as a career if I had continued my education in Thailand.

After our parents divorced, my siblings and I would spend each school year in the United States with our mother and then travel back to Laos and Thailand for three months to live with our father, who was still flying for the war effort at the time. I continued my international travel through college, until just before I began medical school.

Shaping a Cross-Cultural Medical Career

Minnesota Medicine: Neither of your parents is a physician. Why do you think medicine appealed to you?

Walker: Actually, two of my grandparents were physicians, but they both passed away before I was born. In terms of choosing a career, I don't remember ever considering any career other than medicine. I really wanted the challenge of medicine and the service options I would have as a physician. Medicine was a natural fit with my international interests. I tell medical students and residents who are interested in international work that, as a physician, you're really a tremendous resource for people in less developed countries, where public health and other medical problems can be overwhelming.

Interestingly, four of the five children in my family have at one time or another done full-time refugee work in Southeast Asia—three of us for 10 years or more. Even though my other siblings aren't in medicine, they are very committed to Southeast Asians and helping them through refugee agencies. My older sister is the director for Handicap International in Southeast Asia, which is an agency that makes prosthetic limbs for amputees. My younger sister worked 10 years for the Joint Voluntary Agency, which interviews refugees for resettlement in the United States.

Minnesota Medicine: After you finished medical school, you completed your residency through the Mayo Clinic. Tell us how your career progressed from there.

Walker: One of the wonderful things about Mayo was its support of my involvement in international health. I first worked overseas during my third year of medical school at Mayo. The school allowed me to leave the program for two months to work with the American Refugee Committee on the Thai-Cambodian border, and I subsequently continued my involvement in Southeast Asian health care issues while still in medical school. My plan was to return to Southeast Asia to work with refugees after my internal medicine residency, but because I had put myself through college and medical school, I wasn't in a financial position to go back immediately. Instead, I chose to do emergency room work for several years to pay off my school loans and later return to Thailand. That's just what I did. I was the medical director of the emergency department at Mount Sinai Hospital in Minneapolis for several years. That was a wonderful training ground for international work, which requires the physician to be more than an internist—to be a good primary care provider. In 1987, I arranged my current position at Ramsey before traveling to Thailand to work as medical director for International Rescue Committee at a refugee camp on the Thai-Cambodian border.

“The point is our
[health care] systems
do not have
to be mutually
exclusive.”

Minnesota Medicine: What are your responsibilities at Ramsey and how long have you been with the clinic?

Walker: I've been at Ramsey since 1988, and I'm currently medical director of Ramsey's International Clinic and its International Travel Clinic. I also attend on the medicine wards, teaching medical students and house staff three or four months per year, and I work at Ramsey's Health Center for Women. It's a wonderful mix of outpatient medicine, teaching, and supervising.

With the International Clinic and International Travel Clinic, we're one of the largest specialty clinics at Ramsey. We have an interpretive staff of eight—two Cambodian, two Hmong, two Vietnamese, and two Spanish—and we're hiring a half-time Soviet interpreter. Our basic criteria for accepting patients is that their primary language is something other than English. We see a wonderful mix of patients from all over the world. We see Southeast Asians, Ethiopians, West Africans, Hispanics, Soviets, and

Poles, for example.

Minnesota Medicine: How often do you go to Asia or Thailand?

Walker: I have gone at least once a year since 1988. For several years, I have gone twice. I still have family members living in Thailand, so I sometimes go home simply to see my family and friends. I also am actively involved in refugee issues in Southeast Asia. I've been working with one program out of Case Western Reserve University in Cleveland, Ohio. The university's Center for International Health is revising the medical school curriculum in Vientiane, Laos. I've also been working on a program through the U.N. that helps identify medically at-risk refugees, such as adults with rheumatic valvular disease or children with congenital heart defects who will soon die if they aren't removed from refugee camps. After identifying those at risk, the program finds medical institutions to sponsor and care for the refugees in the United States and other countries.

Minnesota Medicine: You've personally sponsored some refugees. Please tell us a little about that.

Walker: Sometimes I feel overwhelmed by the problem of Cambodian refugees on the Thai-Cambodian border. Providing primary care in a refugee camp is important, but I sometimes feel as though I can't do enough to help individual people, so in the last few years I've sponsored a few individual refugees or refugee families. Currently, two young men—brothers who are orphans—are living with me. One of them worked with me as a medic in a refugee camp on the Thai-Cambodian border and is now one of our interpreters at the International Clinic. Their younger sister, whom they hadn't seen since she was two days old, just arrived a few weeks ago. She's 16 and is now living with us as well.

The Merging of Health Care Practices

Minnesota Medicine: What are some of the medical problems Asians face when they immigrate to the United States?

Walker: For one, Asians face problems accepting Western medicine because of tremendous cultural differences in their health care beliefs and practices. Asians have difficulty trusting and understanding Western medicine, but Western health care providers have also had a tremendous problem understanding and respecting Asian health care beliefs and practices. For example, they haven't encouraged Asian patients to continue their traditional health care practices, particularly the ones we know are not harmful and may even be helpful in solving medical problems.

Some infectious diseases from Southeast Asia can have a long latency period, and health care providers need to be aware of such diseases as melioidosis, chronic parasitemia, tuberculosis, and the hepatitis B carrier state, with its relationship to hepatoma, which is the leading cause of cancer-related deaths in many Asian countries. Physicians need to be aware of hepatitis B immunization protocols, as well as protocols for screening for primary cancer of the liver. However, with refugees in Minnesota for more than 15 years, infectious diseases are less of a primary concern. Instead, refugee and immigrant health care providers are dealing with the long-term psychological consequences of the Vietnam War and of Pol Pot's Cambodia: post-traumatic stress disorder, depression, and severe anxiety disorders. We also continue to struggle with care of chronic illnesses, such as diabetes and hypertension, and lack of familiarity with Western preventive health care practices.

Minnesota Medicine: What are some examples of traditional health care practices?

Walker: Herbal medicine that doesn't have lead or arsenic may be helpful for some patients physiologically and is certainly helpful for its placebo effect. Health care providers are realizing that before patients from other cultures will accept Western health care practices, we must learn about their health care beliefs and practices and use the two systems together to provide effective health care. Western practitioners need to reach out to patients by providing health educational materials in different languages. If we don't do that, we're not going to be effective, especially for chronic problems and preventive care.

Minnesota Medicine: We American physicians are sometimes so enthusiastic about our system that we forget it may not be the only valid care system in the world.

Walker: Exactly. The most important point is that our systems do not have to be mutually exclusive. Certainly, as a Mayo-trained practitioner, I believe in the biomedical model and the practice of Western medicine, but I find that if I encourage patients to continue seeing a traditional healer, for example, a Hmong shaman or a

Cambodian Kru Khmer, the patients also come back to me for health care.

Refugee Health Care in Minnesota

Minnesota Medicine: Lack of immunizations led to a measles epidemic in St. Paul's Asian community last year. How can we prevent another epidemic?

Walker: Immunization is a significant problem for minorities because they lack access to health care. Some of the Hmong children who contracted measles were under 15 months old—under the age at which immunization is recommended—so in those cases, the outbreak was not a result of Hmong families avoiding immunization. During the measles epidemic, the media portrayal of Hmong families was sometimes quite racist. People assumed that Hmong families were not willing to immunize their children, when, in fact, many families did not know that immunizations were needed at a certain time or didn't know where to get immunizations.

How do we reach minority communities? We need to get the message out in the Hmong language, as well as in Spanish, Cambodian, and Vietnamese, so that family members know about immunizations and where they can get them. Language is a primary barrier to health care access.

Minnesota Medicine: How well did the state health department respond to the measles epidemic?

Walker: They were the movers and shakers in responding to the epidemic. The Acute Diseases Program did an absolutely superb job. Ramsey County has a wonderful group of public health nurses that we affectionately call the "I" team. They are an "international" team of nurses specifically focused on reaching Southeast Asian and other minority communities. The nurses have had years of experience reaching out to those communities either in refugee camps or in the United States. The group was actively mobilized during the measles epidemic. The St. Paul Division of Public Health, the Minnesota Health Department, and the Ramsey County "I" team were all crucial in halting the measles epidemic.

Minnesota Medicine: Minnesota appears to be very committed to refugee health care.

Walker: That's one of my reasons for continuing to live in Minnesota. It's a wonderful place to be if one wants to do refugee health care. We have the fourth largest refugee population in the United States. We have more than 40,000 refugees from Southeast Asia in Minnesota. For example, one of every 18 people in St. Paul is Asian. In Minneapolis, one of every 22 people is Asian. And 23 percent of the kindergartners in the St. Paul school system are Asian.

There are a lot of reasons for the large number of Asians in our state. Several agencies in Minnesota have sent medical volunteers to places around the world to do refugee health care—Minnesota International Health Volunteers and the American Refugee Committee, for example. One reason refugees come to Minnesota is

because of the very large number of Minnesota physicians, nurses, and other health care providers who have done international work. Those individuals speak highly of our state and the refugee services that are available, and many of them sponsor refugees as well. Minnesota also has many church-affiliated and other agencies that sponsor refugees. The refugee pipeline to Minnesota has been active since 1975 or earlier.

In addition, many services are available to refugees in Minnesota. More than 70 refugee service providers in the Twin Cities offer refugee health, English as a second language classes, and job training programs. Forty-four mutual assistance associations, refugee self-help agencies, are listed in the Twin Cities area.

Looking to the Future

Minnesota Medicine: What do you think the future holds for Cambodia, now that there seems to be an established peace? Do you think that any of the Cambodian refugees will consider returning to Cambodia?

Walker: I believe most of the 300,000-plus Cambodians on the Thai-Cambodian border would want to go home if they knew true peace existed and knew they could make a living for themselves. They would go back to

farming or to their lives in the cities. One major concern is the land mines in Cambodia, which is one of the most heavily mined countries in the world, probably aside from Kuwait at present. Today, 600 to 1,000 people are killed or maimed per month in Cambodia from land mines. I have a lot of hope for the future of Cambodia during the next decade or so. The country will need a tremendous amount of international financial support to rebuild after 30 years of war. The American Refugee Committee already has one health program in Cambodia, and I hope Minnesota physicians, nurses, and

other health care providers will return to Cambodia to help rebuild the country. I hope to be involved myself.

Minnesota Medicine: What other plans do you have?

Walker: I would like to get my master's degree in tropical medicine and hygiene, because, as Minnesota and the United States become more multicultural, the need for experts in tropical medicine will continue to rise. One interesting study I recently read said that by the year 2000, one-third of the population growth in the United States will be from immigration. I also plan to continue working to expand Minnesota's role in the provision of high-quality primary care to people from other cultures both overseas and in Minnesota.

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Rural Physicians Associate Program is an academic program that enables selected third-year University of Minnesota medical students to live, learn and work for 9–12 months in a rural community and encourages them to enter rural medical practice after completion of their residency training. Applications are invited for the position of Program Director (with appropriate faculty rank dependent upon individual qualifications). The Program Director, will provide leadership in administration, liaison with community physicians and state-wide community leaders, program coordination with University-based physicians, advocacy for primary health care in rural communities, curriculum development, and conduct relevant research.

The candidate will be expected to be board certified in family practice. He/she should have experience in rural health care and/or involvement in rural health care initiatives and credentials in clinical research and curriculum development. Qualifications for Assistant Professor include demonstrated involvement in research and educational activities; qualifications for Tenured Associate Professor include professional distinction in research and demonstrated effectiveness in teaching and advising; and qualifications for Tenured Professor include a national reputation in research and evidence of leadership in candidate's professional field.

Submit inquiries and curriculum vitae by March 31, 1992 to:

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Chair, RPAP Search Committee
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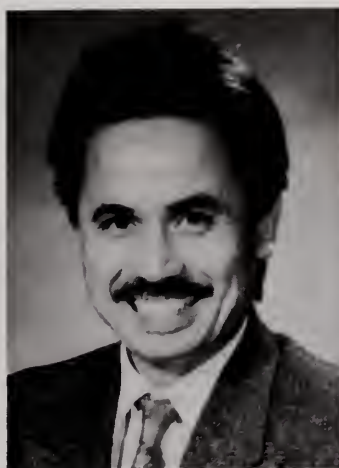
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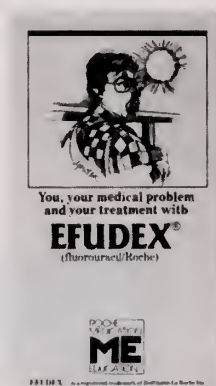
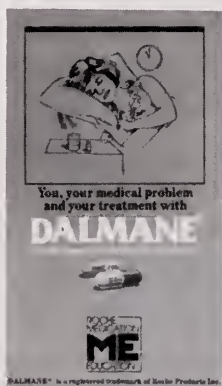
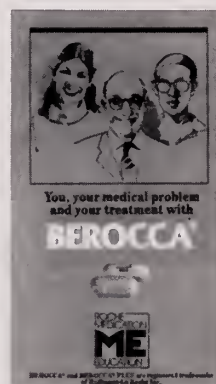
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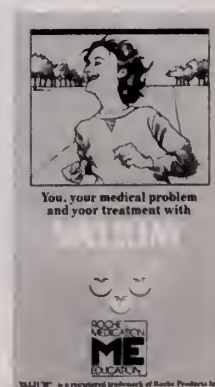
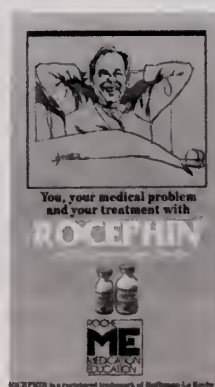
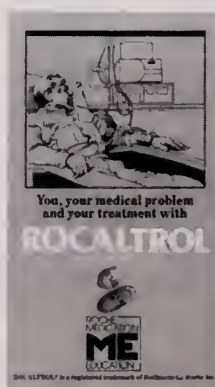
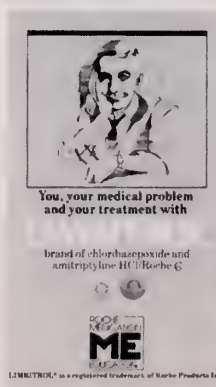
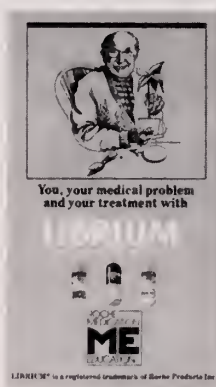
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Cross-Cultural Medicine at Home

Thomas W. Day, M.D.

"Look at me when I speak to you...so I know you're listening."

—white mother

"Why do you watch my mouth...do you see the words come out?"

—Ojibwe mother

These statements reveal the marked variation between the norms guiding social interaction in Ojibwe and white American cultures. Making eye contact when talking to a doctor is the norm in white American culture, but among Ojibwe, direct eye contact with a health practitioner may be a sign of disrespect or outright defiance. Many culturally based practices result in misunderstanding, which, in turn, can lead to stereotyping. Most Minnesota physicians have likely heard some stereotyping of Ojibwe patients—that they are disinterested, present a flat affect, avoid eye contact, say very little, and offer only tangential or indirect responses. Those same physicians, however, may not be aware that their Ojibwe patients hold stereotypic views of physician behavior as well. Generally, the Ojibwe see the white American doctor as distrustful, defiant, distant, fast-talking, and ignorant about the realities of life as an Indian person. Like many stereotypes, these contain elements of truth, and, taken together, they suggest that conflicting expectations of Ojibwe people and white doctors could jeopardize collaboration, create alienation, and disrupt continuity of care. The physician who treats Ojibwe patients should be well aware of the potential for misunderstanding.

Similarly, the physician who steps into an examination room to be greeted by an Ethiopian refugee with limited English skills immediately recognizes that she is entering a cross-cultural interaction. She would be aware of the importance of clear communication and would likely supplement verbal statements with drawings and written instructions. An enlightened physician would watch for subtle messages from the patient and be careful to avoid making unintended, non-verbal statements. Most important, the physician would prepare herself to recognize and tolerate values and goals different from her own.

Most physicians realize that treating a patient who speaks a foreign language is a cross-cultural encounter, but, in fact, any communication involving a patient with a set of values different from one's own is cross-cultural. The skills needed to treat an adolescent or street person, for example, are qualitatively the same as those required for treating a patient of a different nationality.

The term culture refers to patterns of learned behaviors, customary beliefs, social norms, and values shared by members of a group. Patients from other cultures may understand health, illness, and medical care in ways that differ greatly from a white American doctor's understanding. In many cultures, traditional health practitioners, such as the Hmong shaman or Indian medicine man, may appear to compete directly with "modern" or Western medical care. For example, many traditional Hmong families continue to rely on a shaman to diagnose and cure illness using herbal medicine or ritual ceremonies. The American physician's empirical scientific training may prejudice him against such cultural health practices, and the patient may interpret such prejudice as racism. More than one Southeast Asian family has been investigated for child abuse after health professionals noted the skin lesions caused by traditional coin rubbing treatment.

Structured physician-patient interactions beginning in medical school prepare physicians to care for people in the traditional Western medical setting. These experiences teach us certain assumptions and expectations; for example, we are trained to believe that most disease derives from a physiological ailment that a "good" doctor will identify, and we expect that a "good" patient will answer all questions with declarative sentences and will follow directions precisely. Yet, patients who have exclusively experienced non-Western medical models have no reason to act according to our expectations, and they may frustrate and confuse us when they don't. Likewise, the methods of the Western-model physician may bewilder the patient.

Cross-Cultural Methods

"It is more important to know what sort of a patient has a disease than what sort of disease a patient has."

—Sir William Osler

Sir William Osler had a good point. Learning to care for people from other cultures, or even people from the same culture who use non-traditional treatment methods, such as Christian Science practices or chiropractic treatments, can be demanding and takes preparation. When such preparation is inadequate, the doctor and patient may be unable to collaborate: Illnesses may be misdiagnosed. The patient may have difficulty complying or may refuse to cooperate. Resources may be misused and alienation may develop between doctor and patient early

in the relationship. Later on, the physician will likely become frustrated and angry, feel disoriented and, eventually, helpless. Preparation can help the physician avoid such culture shock.

Martin has outlined several suggestions for physicians who treat patients with health beliefs different from their own.¹ According to Martin, the physician should 1) listen in an unhurried manner; 2) use open-ended questions that will encourage discussion about the patient's expectations and beliefs; 3) try to identify the patient's beliefs about the cause of symptoms, about the expected outcome of the illness, and about the benefits and risks of treatments; and 4) acknowledge and respond to the patient's beliefs when interpreting symptoms and determining the appropriate treatment. This last step is probably the greatest challenge—selecting a medically appropriate treatment that does not conflict with the patient's beliefs. Can the physician accept the patient's use of traditional methods and visits to traditional healers and at the same time prescribe Western methods without offending the patient? To do so, the physician must be cognizant of her own behaviors, goals, biases, ethics, spirituality, and beliefs about health and illness.

Traditional Ojibwe Practices

Outside the Minneapolis/St. Paul metropolitan area, the Ojibwe people are Minnesota's largest minority group. Examination of their traditional health beliefs and practices exemplifies important aspects of cross-cultural medical interaction.

Before Europeans arrived in North America, groups of Ojibwe people functioned very effectively in the northern environment. Their success resulted from well-coordinated mutual effort and through promotion of the group. Individuals' needs were subordinated to the needs of the family and the band. Three important values typify traditional Ojibwe culture: wholism, balance, and harmony. Together, these cultural traits determine many other aspects of traditional life and influence each person's beliefs and behaviors.

Wholism

The practice of wholistic medicine in the dominant culture has received increasing public attention recently, but few non-Indian health care professionals comprehend the degree to which many American Indian cultures have developed the concept of wholism. In traditional Ojibwe culture, the individual is viewed as the dynamic interaction of three components: body, mind, and spirit.² The inner core (heart, conscience) and the immortal part of the person make up the Spirit Force, which is strengthened through meditation and requires self-esteem, a sense of belonging, faith, and fun. The mind is nurtured

by learning. To function well, it needs discipline, knowledge, security, and freedom. The body (the least important of the three) needs oxygen, water, food, and shelter and is refreshed by sleep. The traditional Ojibwe healer treats all three components of the whole person. This differs considerably from the Western medical model, which requires separate healers: a psychiatrist, an internist, and a member of the clergy. Under traditional

Ojibwe beliefs, the natural world is also viewed wholistically. Humans are but one component of the natural order. The other components—plants, rocks, animals, birds, etc.—are honored through traditional practices.

Balance

The traditional Ojibwe acknowledges dynamic interaction among the constituent parts of the individual and those of the natural world, while emphasizing the importance of balance among the parts. Indeed, overdevelopment of one component at the expense of the others is akin to illness. Disease is the consequence of imbalance within the individual. In the view of the traditional Ojibwe,

white society's efforts to control nature disrupt the natural balance, with negative consequences; for example, dams cause pollution and floods, which kill fish and animals by destroying their natural habitats.

Harmony

The third traditional Ojibwe value is harmony. People succeed in their environment through knowledge and respect of the coexisting beings and by achieving a state of harmony with them. The person who recognizes an interdependence with a tree would be unlikely to cut it down just to watch it fall. Harmony within the social group is also valued. An American Indian band dependent on complementary interaction of all members cannot tolerate major discord. Although individual expression is greatly valued and defended, such expression cannot threaten the group's cohesion, which is achieved through interconnections of the family and group as well as ties to the natural world. Indeed, disease results from conflict among the individual and the family, tribe, environment, or universe.

When Traditional Ojibwe and Western Medical Care Come Together

Wholism, harmony, and balance helped the Ojibwe survive in a frequently hostile environment. Traditional Ojibwe still hold these values, and the physician must consider this when treating Ojibwe patients. The physician should recognize that use of the culture's teachings may help to achieve his and the patient's common goal—improved health. People of Ojibwe ancestry may follow the traditional culture closely, not at all, or to any degree

“The more disparate a patient's and doctor's world views and lifestyles, the greater the effort required on both sides to communicate and collaborate.”

in between. Harmony can be achieved in circumstances that appear contradictory to the Western view. A woman who participates in every pow-wow may be a devout Lutheran. A university scholar may carefully follow traditional teachings—including meditating every day at sunrise and visiting the medicine man before important events. The physician who sees Indian patients will have few clues to indicate the form of spirituality they practice. Simply determining whether a patient has gone to a traditional healer or attends church can greatly improve the physician's understanding of the patient.

A very traditional Ojibwe who has bodily disease beyond the medicine man's expertise may be referred to a physician for care. The medicine man recognizes that physicians have more drugs and procedures to treat physiologic ills. If the patient needs to be hospitalized, the physician should recall the Ojibwe values of wholism, balance, and harmony and realize that healing the patient will require more than an operation and drugs. Just as some patients require a Catholic priest, the traditional Ojibwe may need to be seen by a medicine man and, if severely ill, may require a healing ceremony. The ceremony assures treatment of the whole person by strengthening the spirit and by promoting mental health and, therefore, helps the patient return to balance and harmony. Because the ceremony may involve the burning of sage or cedar, chanting, or the use of a drum or flute, the physician and nurses should help determine the best time and place for the ceremony in order to minimize possible interruptions by curious patients and staff. The doctor practicing cross-cultural medicine can facilitate such a visit by intervening with the hospital hierarchy. In Duluth, medicine men are accorded "community clergy" status and their visits are coordinated through the chaplain's office.

White medical professionals must be aware of other aspects of Ojibwe culture and how they can affect a patient's use of the health care system. The physician should realize, for instance, that a sudden illness or family emergency may supersede an Ojibwe individual's own needs—even if it means missing a doctor's appointment. The physician who recognizes that his patient is following cultural dictates will more easily tolerate what appears to be unusual or noncompliant behavior.

Summary

The cross-cultural approach allows the white physician to see the Ojibwe patient as a person with goals both similar and different from her own. Both the physician and the patient understand that the purpose of the visit is to retain or acquire good health. However, the expectations, communication, and the style of interaction may mask that concordance. Even the definitions of health differ between physician and patient. The Western medical model emphasizes normal physiologic health. The Ojibwe view incorporates spiritual health to a greater degree and emphasizes a wholistic approach encompassing a harmonious balance among the individual, community, and nature, as well as among body, mind, and spirit.

The methods and attitudes so apparent in cross-cultural medical interactions are really no different from those needed for the delivery of good medical care generally. The more disparate a patient's and doctor's world views and lifestyles, the greater the effort required on both sides to communicate and collaborate. Nearly every patient encounter will be improved by a cross-cultural perspective. Acknowledgment and tolerance of health practices different from our own can lead to greater flexibility and understanding within the medical care system, thereby allowing for care with less confrontation and conflict. Physicians who incorporate such methods will likely gain better understanding of their own values and practices, which will enhance their care of all patients.

MM

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REFERENCES

1. Martin AR. Exploring patient beliefs: steps to enhancing physician-patient interaction. *Arch Intern Med* 1983; 143:1773-5.
2. Clark F. Interfacing traditional and Western medicine. Sixth annual Native American emphasis science research symposium, University of Minnesota-Duluth School of Medicine, August 1986.

ADDITIONAL READING

1. Coulehan, JL. Navajo Indian medicine: implications for healing. *Fam Pract* 1980;10(1):55-61.
2. Hall ET. *The Silent Language*. Garden City, New York: Doubleday, Anchor Books, 1973.
3. Leiniger M. *Transcultural health care: issues and conditions*. Philadelphia: FA Davis Co., 1976.
4. Lewis TH. A Sioux man describes his own illness and approaching death. *Ann Intern Med* 1980;92:417-8.
5. Martin M. Native American medicine—thoughts for post-traditional healers. *JAMA* 1981; 245(2):141-3.
6. Nidorf JF, Morgan MC. Cross-cultural issues in adolescent medicine. *Prim Care* 1987;245(2):69-82.
7. Snow LF. Traditional health beliefs and practices among lower class black Americans. *West J Med* 1983;139(6):820-8.
8. Thao X. Southeast Asian refugees of Rhode Island: the Hmong perception of illness. *RI Med J* 1984; 67:323-30.

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A Job Well Done?

Learning to Care for a Patient with AIDS

J. Randall Curtis, M.D.

Sitting here in the intensive care unit, waiting quietly while friends and family gather around the bedside to say their final good-byes to Paul, I find myself staring blankly out the window. The mechanical whir of the ventilator and the cold December rain on the window help me to drift peacefully back over the last two and one-half years.

Paul was 23 years old when he and I first met. It was a warm July day in Seattle. I was in the first month of my internship, and it was Paul's first visit to my clinic. He had been healthy all his life, until the previous month, when he landed in the hospital with bacterial pneumonia. He did well, spending only 36 hours in the hospital, and was referred to my clinic for follow-up care. As I rounded the corner to the examination room, the first I saw of him was his black, pointed-toe, suede boots propped up on my desk. When I introduced myself, standing formally with right hand outstretched, he slipped his feet slowly off the desk, put his *Rolling Stone* magazine in his canvas shoulder bag, and offered his hand, but didn't stand. I felt the contrast between his floppy blond curls hanging down around his round gold-rimmed wire glasses and my close-cut carefully combed brown hair: his oversized gray sweatshirt and my shirt and tie. Yet I remember feeling put at ease by his warm smile and attentive blue eyes. Because his medical history was short, we had plenty of time to cover nonmedical issues. He worked as a chef at a local restaurant but wanted to open a restaurant of his own in a few years. His restaurant was going to be such a success that he would be able to open a new one every time he felt ready to move to a new city. His last restaurant was going to be on one of the San Juan Islands where he and his lover would retire.

He seemed very comfortable telling me he was gay but added quickly that he had practiced safe sex since 1982 and had been in a monogamous relationship for the last five years. He had never had an HIV test, mostly because he didn't think he was at high risk. I talked him into having HIV serologic testing. Much can be done these days—even before any symptoms appear, I remember saying. I expected the result to be negative but wanted to be reassured because of his recent pneumonia.

He returned a week later. I greeted him cheerfully in the hall and went off to find his chart while a nurse put

him in an examination room. When I found his chart and his HIV results, I had to sit down alone for a few minutes to collect my thoughts. I hadn't received any training on how to tell a 23-year-old that his dreams and hopes may have to take on an entirely new time frame—that he would probably never own a restaurant or retire in the islands. I remember hoping that he wouldn't break down and cry in my office—more for my sake than his. I also remember wanting to let him place his hope on the possibility that the test was wrong, but that didn't seem fair. Somehow we both got through the next half hour.

Over the next two years, Paul and I saw a lot of each other. There were spells when we saw each other once a week. Often he would come to the clinic just to express his fears and anxieties; his friends and family sometimes found it difficult to listen to his anguish. Most of all, he feared the loss of freedom that he'd seen bedridden friends experience. At first, I would try to hide my discomfort when he talked about being afraid or when he cried. With time, I learned to listen without withdrawing or trying to talk him out of his pain. Eventually, I gave him my home phone number and he would sometimes call me there with urgent questions or simple worries.

He called me at home about a year ago; a close friend had died several days earlier and Paul had just returned from the memorial service. Paul called, he said, to ask me about some sores in his mouth. The pauses in his conversation made me suspect that the mouth sores were not his main concern. When I asked about his friend, he told me the story of a carefree young artist with progressive dementia, many of whose friends had pulled away in the last weeks. Paul resented those friends, his friends, who had stopped going to the hospital. Yet each time Paul went to the hospital to meet the unrecognizing eyes and to hear the incoherent ramblings, his anguish and sense of futility grew. He would dread each visit and then would chastise himself for his feelings. At first I tried to ease his guilt, but when my words met with a cool reception, I realized that wasn't what he wanted. Instead, I listened. The next time I saw him, the crisis had passed and the mouth sores had healed. Paul thanked me more for the mouth rinse than for the time we had spent talking, but it wasn't the mouth rinse prescription that made me feel most like Paul's doctor.

"With time, I learned
to listen without
withdrawing or trying
to talk him out of
his pain."

Paul called me at home three weeks ago to tell me that his usual low-grade fevers were now up to 102 degrees and that he was having trouble catching his breath. I admitted him that night, and he hasn't been home since. Once in the hospital, he seemed to get worse quickly. It wasn't long before Paul and I had to talk about intubation. Even then, Paul had a sharp mind and a knack for asking questions for which there were no answers. I talked in percentages and survival rates; Paul talked in time left to be with friends. Finally, we decided we would intubate him if we had to, but he made me promise that if the outlook became dismal, we would make him comfortable and turn off the machines. Two days after his decision, he was intubated.

There was a flurry of activity about Paul's bed for his first few days in the ICU; consulting residents, fellows, and attendings came and went. Their experience and their technology were called into action, but, in Paul's story, it was the disease that was most persistent. The consultants have since drifted away—in part because they had little left to offer.

The outlook is dismal. He has been intubated for almost two weeks. I can't talk with him anymore, but he writes some and still has those crystal-clear blue eyes.

Sitting here in the ICU, staring out blankly at the

drizzling gray sky, I realize that I feel content. I'm sad, although perhaps not as sad as I was that day when I saw Paul's HIV results and felt an iron door slam shut on his future. Sad, but also proud of my role in Paul's life. I couldn't save his life, but I worked hard to give him as much time as possible. Not time spent exhausted and unable to get out of bed, but time to be with friends, to enjoy a breeze, or to cook a meal. When his last infection came, I acted quickly and aggressively in hope of giving him more time. But now it is clear that this is not the type of time we were fighting for, and I am prepared to stop. Not to stop giving my support and comfort. Not to stop spending time with Paul. But to stop trying to prolong his life. To some, this would be a failure. To me, for better or worse, this was a job well done.

MM

J. Randall Curtis is a physician at the Seattle Veterans Affairs Medical Center.

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Carcinogenesis, Mutagenesis, Impairment of Fertility—A 2-year oral carcinogenicity study in rats with doses as high as 500 mg/kg/day (about 80 times the recommended daily therapeutic dose) showed no evidence of a carcinogenic effect. There was a dose-related increase in the density of enterochromaffin-like (ECL) cells in the gastric oxyntic mucosa. In a 2-year study in mice, there was no evidence of a carcinogenic effect in male mice, although hyperplastic nodules of the liver were increased in the high-dose males as compared with placebo. Female mice given the high dose of Axid (2,000 mg/kg/day, about 330 times the human dose) showed marginally statistically significant increases in hepatic carcinoma and hepatic nodular hyperplasia with no numerical increase seen in any of the other dose groups. The rate of hepatic carcinoma in the high-dose animals was within the historical control limits seen for the strain of mice used. The female mice were given a dose larger than the maximum tolerated dose, as indicated by excessive (30%) weight decrement as compared with concurrent controls and evidence of mild liver injury (transaminase elevations). The occurrence of a marginal finding at high dose only in animals given an excessive and somewhat hepatotoxic dose, with no evidence of a carcinogenic effect in rats, male mice, and female mice (given up to 360 mg/kg/day, about 60 times the human dose), and a negative mutagenicity battery are not considered evidence of a carcinogenic potential for Axid.

Axid was not mutagenic in a battery of tests performed to evaluate its potential genetic toxicity, including bacterial mutation tests, unscheduled DNA synthesis, sister chromatid exchange, mouse lymphoma assay, chromosome aberration tests, and a micronucleus test.

In a 2-generation, perinatal and postnatal fertility study in rats, doses of nizatidine up to 650 mg/kg/day produced no adverse effects on the reproductive performance of parental animals or their progeny.

Pregnancy—Teratogenic Effects—Pregnancy Category C—Oral reproduction studies in rats at doses up to 300 times the human dose and in Dutch Belted rabbits at doses up to 55 times the human dose revealed no evidence of impaired fertility or teratogenic effect; but, at a dose equivalent to 300 times the human dose, treated rabbits had abortions, decreased number of live fetuses, and depressed fetal weights. On intravenous administration to pregnant New Zealand White rabbits, nizatidine at 20 mg/kg produced cardiac enlargement, coarctation of the aortic arch, and cutaneous edema in 1 fetus, and at 50 mg/kg, it produced ventricular anomaly, distended abdomen, spina bifida, hydrocephaly, and enlarged heart in 1 fetus. There are, however, no adequate and well-controlled studies in pregnant women. It is also not known whether nizatidine can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Nizatidine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers—Studies in lactating women have shown that 0.1% of an oral dose is secreted in human milk in proportion to plasma concentrations. Because of growth depression in pups reared by treated lactating rats, a decision should be made whether to discontinue nursing or the drug, taking into account the importance of the drug to the mother.

Pediatric Use—Safety and effectiveness in children have not been established.

Use in Elderly Patients—Healing rates in elderly patients were similar to those in younger age groups as were the rates of adverse events and laboratory test abnormalities. Age alone may not be an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function.

Adverse Reactions: Worldwide, controlled clinical trials included over 6,000 patients given nizatidine in studies of varying durations. Placebo-controlled trials in the United States and Canada included over 2,600 patients given nizatidine and over 1,700 given placebo. Among the adverse events in these placebo-controlled trials, only anemia (0.2% vs 0%) and urticaria (0.5% vs 0.1%) were significantly more common in the nizatidine group. Of the adverse events that occurred at a frequency of 1% or more, there was no statistically significant difference between Axid and placebo in the incidence of any of these events (see package insert for complete information).

A variety of less common events were also reported; it was not possible to determine whether these were caused by nizatidine.

Hepatic—Hepatocellular injury (elevated liver enzyme tests or alkaline phosphatase) possibly or probably related to nizatidine occurred in some patients. In some cases, there was marked elevation (>500 IU/L) in SGOT or SGPT and, in a single instance, SGPT was >2,000 IU/L. The incidence of elevated liver enzymes overall and elevations of up to 3 times the upper limit of normal, however, did not significantly differ from that in placebo patients. All abnormalities were reversible after discontinuation of Axid. Since market introduction, hepatitis and jaundice have been reported. Rare cases of cholestatic or mixed hepatocellular and cholestatic injury with jaundice have been reported with reversal of the abnormalities after discontinuation of Axid.

Cardiovascular—In clinical pharmacology studies, short episodes of asymptomatic ventricular tachycardia occurred in 2 individuals administered Axid and in 3 untreated subjects.

CNS—Rare cases of reversible mental confusion have been reported.

Endocrine—Clinical pharmacology studies and controlled clinical trials showed no evidence of anti-androgenic activity due to nizatidine. Impotence and decreased libido were reported with similar frequency by patients on nizatidine and those on placebo. Gynecomastia has been reported rarely.

Hematologic—Anemia was reported significantly more frequently in nizatidine than in placebo-treated patients. Fatal thrombocytopenia was reported in a patient treated with nizatidine and another H₂-receptor antagonist. This patient had previously experienced thrombocytopenia while taking other drugs. Rare cases of thrombocytopenic purpura have been reported.

Integumental—Urticaria was reported significantly more frequently in nizatidine- than in placebo-treated patients. Rash and exfoliative dermatitis were also reported.

Hypersensitivity—As with other H₂-receptor antagonists, rare cases of anaphylaxis following nizatidine administration have been reported. Rare episodes of hypersensitivity reactions (eg, bronchospasm, laryngeal edema, rash, and eosinophilia) have been reported.

Other—Hyperuricemia unassociated with gout or nephrolithiasis was reported. Eosinophilia, fever, and nausea related to nizatidine have been reported.

Overdosage: Overdoses of Axid have been reported rarely. If overdosage occurs, activated charcoal, emesis, or lavage should be considered along with clinical monitoring and supportive therapy. The ability of hemodialysis to remove nizatidine from the body has not been conclusively demonstrated; however, due to its large volume of distribution, nizatidine is not expected to be efficiently removed from the body by this method.

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BORDER CROSSINGS

Refugees Travel Difficult Route to Health Care



Dr. Charles Oberg examines 2-year-old Ames Yang, a Hmong patient at the Family Medical Center, an HCMC satellite clinic in south Minneapolis.

“**T**his pain is with me always. But it’s no problem. I have the war in my mind all the time. No problem. And I remember my children who died in the war. No problem.”

The tiny woman with rounded face and long, dark hair punctuates each sorrow with a phrase of denial.

But soon tears well up in her eyes and words begin to flow. “We escaped because the war is very hard. It killed my two oldest children. And my two brothers. And 20 cousins, they are dead. All the family. That’s why we left. We feel good because we escaped. We are alive. But I remember my children.”

.....

*Story and photos by
Douglas Clement*

Just over a year ago, Maria Lopez (not her real name) arrived in Minnesota from El Salvador with her husband and their four surviving children. She now complains of persistent headaches and back pain. Her youngest son is deaf in one ear and constantly has colds—a consequence, she says, of having been raised in a war zone. “My child is very sick now, but I don’t have Medicaid. I don’t have any assistance to cover for his bills. So I don’t bring him to the doctors.”

Maria is an alien, a refugee, an immigrant. She is a new American. And she presents our health care system with difficult challenges. Before Maria and her family get the care they need, they will likely encounter barriers to health care access, personal communication, and cultural respect. For refugees in Minnesota and the doctors who treat them, these obstacles to good health care have often seemed borders never to be crossed. But time, tolerance, and cultural sensitivity are clearing the way.

America, of course, is a nation of immigrants. In a sense, all of us who are not Native Americans are boat people. The largest recent wave of immigration began in 1975, as Hmong from the mountains of Laos, Vietnamese from their shattered country, and Cambodians fleeing Pol Pot’s violence began to enter the United States. By 1980, more than 10,000 Southeast Asian refugees had come to Minnesota; 6,500 more arrived the next year. By October 1991, we had an official total of 40,136 refugees living within Minnesota’s borders, 92 percent of whom were Southeast Asian.¹

These numbers significantly understate reality. Internal migration (e.g., Hmong moving from Wisconsin to Minnesota) and illegal immigrants swell the numbers far past statisticians’ ability to keep track. The state’s official refugee count includes, for example, only nine refugees from Latin America.

The numbers alone also obscure significant differences within each population. The Southeast Asian grouping comprises Cambodians, Vietnamese, Laotian, and Hmong, including white and blue Hmong, urban and rural Hmong, upper- and lower-status Hmong, and animist and Christian Hmong. Three phases of Vietnamese immigration have brought city dwellers, then farmers, and now Amerasian children and “re-education camp” detainees.

These differences have strong implications for health care providers, but many remain ignorant that distinctions exist. “I still, to this day, occasionally will get a call saying, ‘I need a Southeast Asian interpreter,’” says Ellen Rau, Hennepin County Medical Center’s interpreter supervisor. “‘OK, what language?’ I ask. ‘How should I know?’ they reply.”

Confusion is likely to grow. Recent refugee influxes



Laotian interpreter Khamtu Munsisoumang translates for Saeng Phetsamone, a pregnant patient at the Family Medical Center.

to Minnesota include Soviet, Ethiopian, Polish, and Romanian natives, each population with its own religious, linguistic, and cultural distinctions. The result is waiting rooms that sound like Towers of Babel, clinics that look like U.N. lobbies, and doctors who don’t know where to begin.

“The situation [in the late 1970s] was health care providers being overwhelmed by a group of people with very different medical problems and very different cultural beliefs about how one interacts with a health care provider,” says Patricia Walker, M.D., medical director of St. Paul-Ramsey’s International Clinic. Diseases rarely encountered in Minnesota were commonplace among the refugees: malaria, tuberculosis, hepatitis B, intestinal parasites, malnutrition, anemia, chronic ear infections, and serious dental problems.

Faced with an overwhelming situation, Minnesota responded as it traditionally does—with generosity and “can-do” optimism. In Minneapolis, the Health Department screened new Minnesotans for TB and sent the women and children down the hall to Maternal and Child Health. The men, it was hoped, would be helped by their sponsors to get medical care outside public health programs. Similar screening was done in St. Paul.

In 1980, Neal Holtan, M.D., now medical director of the St. Paul Public Health Department, helped start St. Paul-Ramsey’s International Clinic. “The plan was to do this for five years and then the need would cease to exist. That’s how naive we were,” recalls Holtan. “We thought once [the refugees] got settled, learned English, and got jobs and insurance, we wouldn’t need the clinic anymore. Well, it’s grown every year since 1980, and it’s busier now than it’s ever been.”

Busier. And more complex. Initially, health care providers were confronted with the acute medical problems of immigrants from tropical countries, and while the problems were unusual for Minnesota, treatment was fairly basic. But over time, refugee health care needs changed significantly and posed more serious challenges. Illness patterns evolved from the acute to the chronic,

from physical to mental, and from bacterial origins to those that are social.

"A shift has occurred," says Walker. "The major problems used to be infectious diseases of a public health significance. The major problems now are primarily personal issues: post-traumatic stress disorder, depression, anxiety, and people who've been victims of torture. They're more chronic, more difficult to treat."

Surmounting Barriers to Access

Every patient must cross several borders to receive health care. The first passage—learning about, getting to, and paying the doctor—sounds simple enough. But for an immigrant, those steps can seem impossible. Without practical access to health care information and facilities, refugees may never seek help. Maria Lopez from El Salvador, for example, knows little about the health care available in Minnesota and hasn't the transportation or funds to access it.

"My concern is that refugees don't have basic health information," says Deborah Wexler, M.D., a family physician with West Side Health Center in St. Paul. "There's been no public health effort to really teach people in their own language about *why* immunizations are important." After the measles outbreak of 1990, Wexler worked with St. Paul Public Health to provide health care to Hmong families where they live, rather than hoping they'd go to area hospitals.

Wexler now runs a weekly clinic in McDonough Homes, a predominantly Hmong community in North St. Paul. Without such efforts, says Wexler, "we'll have

"Most [refugees]
are finding jobs
that do not provide
health care
coverage; they're in
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American working
poor."

—Carol Berg

in Africans and some South Americans, according to the Centers for Disease Control, which recently added hepatitis B inoculation to the list of standard vaccinations for all infants.)

Fear, as well as distance and ignorance, can keep refugees away. "Most of the people we see are illegal [aliens]," observes Linda Gonzales, a medical assistant at West Side Health Center, which serves many Latin American immigrants. "They're afraid to ask for any kind of help because they think that as soon as we ask them, 'Are you legal?' we're going to turn them over [to authorities]."

Even legal immigrants who pursue the American dream are likely to find health care financially inaccessible. "Most are finding jobs that do not provide health care coverage; they're in that category of the American working poor," notes Carol Berg, Refugee Health Program coordinator for the Minnesota Department of Health.

Mastering the Art of Cross-Cultural Communication

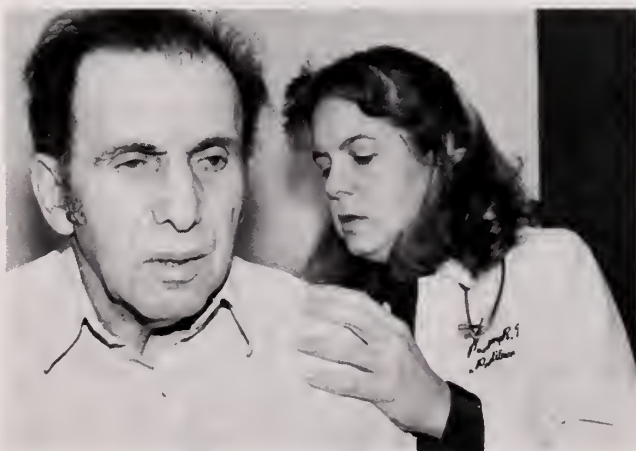
For those who gain physical and financial access to Minnesota's health care providers, the next barrier is communication. "Without a well-trained interpreter," says Holtan, "it's practically impossible to provide quality care."

Amos Deinard, M.D., of Community University Health Care Center (CUHCC), concurs: "The use of professional interpreters really is a key to providing health care to any group. You cannot say, 'Well, I'll bring my sister along, or my cousin.' There is an art to being an interpreter."

Those who've neglected the art have caused more than a little confusion. Win Terrell, a St. Paul health educator, recalls the time a doctor needed a blood sample from a Hmong patient. "The interpreter was not much more skillful than the client," says Terrell. "And the words 'test' and 'taste' sound very much alike. For a long time, we had to fight the myth that our doctor wanted to drink the blood. And when we asked for urine and stool specimens, they just laughed."

But the art of interpretation goes well beyond accurate word choice. When refugees first came to our state, the major problems of miscommunication were due not to poor translation, but to conflicting expectations and inadequate training of interpreters. Doctors often enlisted interpreters as assistants, expecting them to persuade patients to accept medical advice. Patients, in turn, wanted interpreters to be their advocates. During serious disagreements, both doctor and patient blamed the messenger.

Today, more Minnesota interpreters have been trained both in medical terminology and in the professional ethics of neutrality, objectivity, and confidentiality. What



Monica Overkamp, a nurse practitioner at St. Paul-Ramsey's International Clinic, questions 68-year-old Russian Lev Abromovich about his back pain.

more epidemics, more measles outbreaks, more hepatitis B." (One in seven Southeast Asians is a chronic carrier of hepatitis B. The virus is also disproportionately common



Dr. Mary Nesvig gives Linda Thao a check-up at the McDonough Homes Community Center while the baby's mother, Shoa Xiong, watches.

still is needed is training for health care professionals in how to work with interpreters. "A kind of tradition has evolved, even in the agencies that are very good at dealing with immigrants, of asking the interpreter to assume different roles," says Bruce Downing, professor of linguistics at the University of Minnesota. "It just makes too many demands on them. ... People tend to be satisfied with it, but when you push them on it, they have horror stories about terrible misunderstandings."

Horror stories aren't hard to come by—of nine-year-olds asked to translate "sedated CT scan" into Laotian, of patients whose ear infections persisted because they thought ear drops were to be taken orally, not aurally—and they'll continue as long as health care providers can't communicate well with their patients.

At present, Hennepin County Medical Center and St. Paul-Ramsey are the only two Twin Cities hospitals with full-time interpreters. CUHCC, Model Cities Health Center, and the West Side clinic have nursing assistants, social workers, and other staff who are bilingual and so serve double-duty. When available, the caseworkers at Jewish Family Services provide telephone interpretation for Soviet Jews, and a few Russian interpreters work free-lance. The efforts are noble, but they're often not enough.

Recent Medical Assistance changes that shift some MA patients away from county hospitals to other health plans may further impede communication. The idea is to improve access to quality care, but some state officials

are concerned that the new system may present barriers to those who don't speak English because the county hospitals are typically better prepared than the private health plans to help foreign patients.

"Some [health plans] are already doing very well," says MDH's Berg. "Others ... have a long way to go as far as learning how to accommodate special needs of newer Minnesotans. The HMOs will tell you the system is in place, but in reality, it doesn't work for the clients. ... A lot of people are falling through the cracks."

Overcoming Culture Clash

"Suppose you were dropped in the middle of a Hmong village in the highlands of Laos and you felt ill," suggests David Loveridge, director of the Wilder Refugee Program. "And you were told that the reason you felt ill was that you'd offended some ancestor and, therefore, you needed to buy a pig and make a sacrifice. Well, you wouldn't want to spend the money

on a pig, for a start. And probably, you wouldn't do it. Now, suppose you also happened to have a bottle of Tylenol handy..."

By making us refugees, Loveridge's hypothetical situation illustrates the third barrier to refugee health care: culture clash. And his story includes all the key elements: different theories of disease causation, non-compliance with a prescribed health care regimen, use of traditional remedies by the noncompliant patient.

Even among Western cultures, healers view illness in very different ways. French doctors, for instance, attribute much disease to "crise de foie" (liver crisis), Germans to "Herzinsuffizienz" (heart insufficiency.) Accordingly, the French prefer suppositories because of proximity to the liver, and Germans use six times the amount of heart drugs per capita as either the French or English.²

It shouldn't be surprising, then, to find that Hmong, Soviet Jews, and Hispanics view illness and its remedies differently than Americans. An animist Hmong, for example, may believe that illness is caused by soul loss, or by the spirit of a dead ancestor visiting his body. Western medicine might treat the symptoms successfully, but the illness will be gone only

if the proper healing ceremony is done to show respect to the ancestors. Because antibiotics were scarce in their homeland, Soviet refugees may expect to keep a child with strep throat out of school for weeks. An Hispanic immigrant may consider "mal de ojo" (evil eye) to be the cause of a serious ailment, or believe that

"There are many ways of being in the world, either culturally or medically, without compromising our standards of care."

—Patricia Walker, M.D.

excessive air can cause back pain.

"I had a woman in my office the other day who said she wasn't going to pay her bill because she didn't get better with the doctor's recommendation," says West Side's Gonzales. The woman, who complained of constantly swollen glands and fever, returned to Mexico to consult a traditional healer. "The curandero gave her some kind of tea to drink," says Gonzales. "She said the doctor here didn't do anything for her, but in Mexico she became 100 percent better. In fact, she wanted us to pay her for the blood that we took for testing."

Such stories sound "quaint" to us, but only cultural arrogance could pronounce other healing theories less appropriate than ours. After all, it is not *our* illness that is being treated. Nevertheless, serious conflicts over medical treatment have occurred in Minnesota. Especially in the early 1980s, doctors who were convinced that surgery was necessary sometimes used verbal intimidation and legal force to ensure that it took place.

Such conflicts have had long-lasting negative effects, observes Walker. "Some people in the Asian community believe that Western health care providers perhaps can't be trusted to be respectful."

"The trust is not there," agrees Cher Vang, Hmong parent representative at St. Paul Children's Hospital. But he's optimistic that Hmong trust will grow if doctors show greater understanding of Hmong concerns and more patience with their decision-making process.

"What the Hmong people want to tell the Western doctors is that they need to be patient," says Vang. "If they spend a little more time and build the trust, in the long run I think we can get things done easier. If the Hmong people trust you, then they will allow you to do whatever you want to do, because they know you aren't going to do any harm."

Appreciation of a patient's world view is a necessity for good cross-cultural health care, but sincere respect can be difficult for physicians who view the biomedical model as the only "right" way of providing health care. "But the reality is that unless you're culturally sensitive, the patient may leave your practice," says Walker. "I think we can acknowledge that there are many other ways of being in the world, either culturally or medically, without compromising our standards of care."

Yet even Walker faces dilemmas. Recently, a young Hmong man under her care suffered his second ventricular fibrillation and died in St. Paul-Ramsey's emergency department. When the ED nurse called Walker at home

to notify her of the death, the doctor decided not to sign the death certificate, hoping that an autopsy might reveal some clue to Sudden Unexpected Death Syndrome.

As soon as Walker hung up the phone she drove down to the ED. "There, a huge extended family of Hmong elders, about 25 people, sat with this young man, stroking his body, grieving his loss," she recalls. "And an older Hmong man gave me a 15-minute lecture about Hmong health care beliefs and religious beliefs. 'You know, I came to America because this is a country where you have freedom,' he said. 'And you are not allowing me to have freedom of religion if you do an autopsy of my nephew. If you do an autopsy, all of

his souls will escape. They won't be able to go with him to the next life. And those souls will wreak havoc on the rest of the family for eternity.'"

Walker signed the death certificate. "I think that was the culturally appropriate thing to do," she now reflects. "But I *still* remain torn as a physician about whether or not we would have found out some clue to a problem that plagues the Hmong community."

Walker is not the only Minnesota physician to encounter such dualities. Usually, however, different ways of healing can run parallel paths. Charles Oberg, M.D., an HCMC pediatrician, recently examined a 2½-year-old Cambodian boy recovering from pneumonia and found long, red bruises on his back. The marks were the result of "coining," a Cambodian treatment for fever that involves rubbing warm oil and coins across the skin. Oberg, who works extensively with refugees, encouraged the parent's use of the traditional cure while also giving a standard course of antibiotics.

Respecting other cultural beliefs does not mean that physicians should start practicing Hmong healing rituals, of course. And trying to include traditional healers within the mainstream health care system is unlikely to succeed. But formal recognition and support of those traditional healers (e.g., the Hmong txiv neeb, Cambodian Kru

Khmer, and Hispanic curanderos) would undoubtedly improve understanding between health professionals who currently view one another with little more than skepticism.

"I encourage health professionals to be very respectful of those folk practices because for years they have worked," says Dr. Blanca Rosa Egas, an Ecuadoran psychiatrist and former director of Community Mental/Chemical Health for Hennepin County. "If traditional healers are doing those practices safely, we

"The Hmong people want to tell the Western doctors that they need to be patient."

—Cher Vang



Neng Vue and her 2-year-old son, Ames Yang.



Two-year-old Rodanal Heng suffered from pneumonia and was given a common Cambodian treatment known as coining. His mother, Chhavy Kim Heng, shows the resulting marks during a visit to the Family Medical Center.

should endorse them."

Ultimately, then, for refugees to cross the final health care border will require that doctors come half-way. "Providing health care to the Hmong and other unique populations must be viewed as a cooperative undertaking," write Deinard and Dunnigan.³ "[It is] a bi-directional process." And in that process, Minnesota's medical community, as much as its newest citizens, will be the beneficiary.

"We talk about our health care system, but what we really have in this country is a sick care system," observes Oberg. "I think [Southeast Asians] have a better understanding of wellness than we do. And just as there's a great deal they can learn from us in regard to the diagnosis and treatment of disease, they have much to teach us about the concept of wellness." MM

Douglas Clement is a free-lance writer and photographer living in Minneapolis.

REFERENCES

1. Refugee and Immigrant Assistance Division, Minnesota Department of Human Services.
2. Payer L. Medicine and Culture. New York: Henry Holt and Co., 1988.
3. Deinard AS, Dunnigan T. Hmong health care: reflections on a six-year experience. *Int Migr Rev* 1987;21(3):857-65

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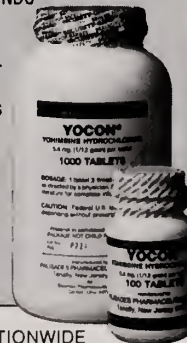
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References:

1. A. Morales et al., New England Journal of Medicine: 1221. November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

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1. Benson RC Jr. Laser photodynamic therapy for bladder cancer. *Mayo Clinic Proc* 1986;61:859-64.
2. Guttormson NL, Bubrick MP. Mortality from ischemic colitis. *Dis Colon & Rectum*, to be published.
3. Chatterjee SN. Use of GOR-TEX grafts as vascular access procedure for chronic hemodialysis. Abstract of a paper submitted to the European Society for Artificial Organs Eighth Annual Meeting, Copenhagen, August, 1981.
4. Thompson NW. Thyroid and parathyroid. In: Welch KJ, Randolph JG, Ravitch MM, et al., eds. *Pediatric Surgery*, 4th ed. Chicago: Year Book Medical, 1986: vol 1, 522-33.

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Hospital-Physician Joint Ventures Revisited

New Tax Ruling May Restrict Hospitals' Options

Steven N. Beck, J.D.

Congress and the Internal Revenue Service have for some time been reconsidering whether and in what circumstances health care organizations should be accorded the benefit of tax-exempt status. Various legislative proposals have emerged, including many that would require hospitals to demonstrate that the public benefits engendered by hospital operations equal or outweigh the value of tax benefits conferred on hospitals through tax-exempt status. In effect, this approach would require hospitals to identify tangible, public benefits and to quantify those charitable benefits to justify their status.

On December 4, 1991, the IRS issued a general counsel memorandum (GCM) that overturned three private letter rulings relating to hospitals' tax-exempt status. The factual focus of the private rulings was on hospitals that sold revenue streams from current and existing operations to limited partnerships involving physician staff members. Each of the three private letter rulings held that the sale of revenue streams did not result in private inurement or otherwise endanger the hospitals' tax-exempt status. The new GCM revises that conclusion and indicates that sale of a hospital's revenue stream in certain circumstances may endanger a hospital's tax-exempt status.

The GCM's underlying philosophical premise is similar to that being heralded by hospital tax-exemption reformers. Essentially, the GCM seems to reject the premise that anything good for the hospital's financial health is good for the public and, thus, supports the hospital's charitable mission. The GCM would instead require a hospital to identify specific effects of a joint venture that support its charitable purposes.

Factual Setting of the New Ruling

The factual setting in which the IRS examined these issues was quite narrow. The three overturned letter rul-

"A venture will no longer be justifiable solely because it will increase hospital admissions or utilization."

ings involved three similar ventures.

The first letter ruling involved a limited partnership's purchase of a hospital's outpatient surgical program and gastroenterology laboratory. The hospital or an affiliated organization was the sole general partner in the partnership. Physicians invested in the venture as limited partners, and the limited partnership interests created an investment return for the physicians that arguably could be maximized through physician referrals. The hospital, as general partner, continued to manage and operate the facilities.

The second letter ruling involved a hospital's outpatient surgery department and day surgery unit, which were competing for business with an ambulatory surgery center that was less than five miles away and involved physician investors. To level the competitive playing field, the hospital created a limited partnership with an affiliated entity as the general partner and physicians as

limited partners. The limited partnership entered into an agreement to use the outpatient surgery facilities in exchange for payment equaling the present value of related income stream. As general partner, the hospital continued to operate the surgery facilities.

The third letter ruling involved establishment of four limited partnerships with a corporate general partner owned jointly by the hospital and a group of physicians. The limited partnerships governed four hospital outpatient departments: outpatient surgery, outpatient diagnostics, ophthalmology, and cardiac nuclear medicine. The effect of the arrangement was to "lease" the departments for a period of time to the limited partnerships. Again, the hospital retained actual control of the facilities through a management agreement.

The IRS Analysis: Re-examining Public Purposes

In substance, the GCM held that the arrangements jeopardized the tax-exempt status of the hospitals for three reasons. First, the sale of the income streams produced "private inurement"—payments resembling dividends—to the medical staff physicians who purchased the income streams. Second, the sale of the income streams resulted in greater than incidental benefits being accorded to private parties and, therefore, conflicted with the hospital's stated public missions. Third, the sale of the income streams may have been illegal under the Medicare fraud and abuse law and, as illegal activity, was not in accordance with the hospitals' tax-exempt purposes.

Each of the three lines of analysis applied in the GCM has separate

significance. The private inurement and "private benefit" tests are really alternative approaches to the same basic issue. "Private inurement" means providing an *insider* or *controlling person* with an interest in the net profits of the tax-exempt entity. There is no exception to the private inurement prohibition for small interests in the net profits; however, private inurement must involve a division of net profits or other payment resembling distribution of a dividend. The private-benefit prohibition, on the other hand, involves an activity that, although undertaken for public charitable purposes, benefits private interests. For purposes of determining whether there is an impermissible private benefit, the benefit need not flow to insiders or controlling persons. Because all charitable activities arguably benefit private persons in some way, private benefit is permissible if it is "qualitatively and quantitatively incidental" to the public purpose of the activity. This means that the private benefit must be *necessary* when providing an important public benefit, and the private benefit must be insubstantial as compared with the public benefit resulting from the activity. The IRS has formulated a practical test to decide whether a joint venture between a hospital and physicians creates an impermissible private benefit. A joint venture is problematic if 1) it does not further a charitable purpose, 2) the hospital is inadequately protected against financial loss, or 3) physician investors have improper financial gain.

The Medicare fraud and abuse analysis included in the GCM reveals a new approach by the IRS to determining whether an activity endangers a hospital's tax-exempt status. This approach again focuses on whether the activity furthers the institution's charitable purpose. The IRS concludes from a policy perspective that an activity that would violate a criminal law does not benefit the public. Thus, the IRS says that an activity amounting to Medicare fraud and abuse endangers a hospital's exemption because it controverts the organization's public charitable purpose.

The GCM analyzed the three fact

situations under the three tests described above. Under each test, the analysis suggested that the arrangement would endanger the facility's tax-exempt status. In discussing the ventures, the GCM characterized the relationship between physicians and hospitals generally as one in which hospitals, driven by the prospective payment system, are using any means available to increase admissions while controlling utilization of ancillary

**"Hospitals should
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hospital services and discharging Medicare beneficiaries as quickly as medically appropriate. According to the GCM, the medical staff holds the key to maintaining the hospital's bottom line. Implicitly, the GCM says that these relationships were entered into solely to maintain or improve that bottom line.

The GCM concludes that the arrangements amounted to private inurement because medical staff physicians are insiders or controlling persons and because the structure of these transactions "creates a result that is indistinguishable from paying dividends on stock."

The GCM further indicated that the private benefits conferred on physician investors in the ventures were direct and substantial, not incidental. Moreover, the public benefit achieved by hospitals in entering into these arrangements seemed tenuous to the IRS. As a result, the GCM concluded that the activities endangered the tax-exempt status of the hospitals under the private benefit test.

Finally, the IRS said that hospital

activities that may be intended to induce or reward referrals must be analyzed in accordance with the principles set forth in the memorandum. The GCM indicated that it had "good reasons" for believing that the ventures violated the anti-kickback statute, but it did not actually conclude that they were Medicare violations. It commented that entering into a joint venture simply as a means to attract, retain, or reward physicians in order to gain the patients they will refer should not be viewed as furthering a hospital's tax-exempt purpose.

The impact of the GCM will be hard to gauge. On its terms, the GCM is limited to the fact situations in the three private letter rulings. Moreover, the GCM emphasizes that these ventures involved historical hospital operations that were sold, and did not involve the expansion of new health care resources, the introduction of a new technology or provider, or the improvement of treatment modalities. One might easily conclude that in a different factual setting, the result might be much different. For instance, if, instead of selling a revenue stream from existing surgery facilities, the ventures had involved the development of new ambulatory surgery centers, the private letter rulings arguably would not have been overturned.

Also worth noting is the extent to which the GCM seems to have been prepared in concert with authorities from the Office of Inspector General of the Health Care Financing Administration (HCFA). The memorandum makes it more clear that these two regulators are combining their expertise in an effort to better understand and attack medical enterprises. It seems likely that hospital ventures will endure greater Medicare fraud and abuse scrutiny than other joint ventures, if only because tax auditors focusing on these issues will supplement the HCFA's own investigative resources.

In response to the memorandum, hospitals should take stock of their joint ventures and be careful to document the charitable purposes of those ventures. Most hospital-physician ventures will either be un-

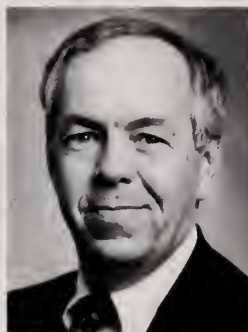
affected by the ruling because they are outside its scope or will be able to point to an expansion of health care resources that furthers the hospital's charitable purposes. However, a venture will no longer be justifiable solely because it will increase hospital admissions or utilization. Ironically, it is also possible that rulings of this kind may push hospitals and physicians into closer relationships than ever before.

Roughly contemporaneously with the GCM's issuance, House Health Committee Chairman Fortney "Pete" Stark introduced a bill designed to provide for specific sanctions, including certain excise taxes, against tax-exempt hospitals entering into specified relationships with physicians that might be described as promoting self-referral. This effort represents another avenue of attack on joint ventures between hospitals and physicians. Evidently, the trend toward greater scrutiny of medical joint ventures is continuing on many fronts. Entering into joint ventures is not impermissible. Nevertheless, the

thicket of regulations governing these ventures continues to grow. **MM**

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K. James Ehlen, M.D.
Chairman, CEO Medica

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ACE is a PC-based system for tracking quality of care through medical record review. It's the first of its kind in the Twin Cities. It was inspired by the pioneering work of J. Michael McCoy, M.D., assistant professor and assistant dean for instructional computing at the UCLA School of Medicine.

Our Medical Policy Council, working with Dr. McCoy and Medica's quality assurance staff, has developed guidelines for the care of several common pediatric and adult conditions. These guidelines identify important elements of care in dimensions such as history, physical examination, diagnostic testing and treatment.

Now we can review ambulatory care in a way that is fair, credible and objective. We can show physicians just how they stack up against their specialty peers. We can identify opportunities for improvement.

We expect this effort to be good news for physicians and purchasers of health care. Physicians will receive feedback and education designed to promote continuous improvement. Purchasers will realize that demonstrable quality improvement *can* be achieved in a large network of independent practitioners.

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Financing Reform

Who Will Pay the Price for America's Health Care?

The Wyatt Company

As health care reform heats up, the business community may be headed for a showdown with federal lawmakers over the financing of a new health care bill, say many observers. U.S. businesses claim they pay more than their fair share of the American health care burden, and given today's business environment, they expect relief from the onerous cost of providing health benefits. To fulfill this expectation, any new national legislation must address the costs of providing access to those individuals now lacking coverage. But American business is not getting its message across, despite urgency felt by business leaders; policymakers seemingly fail to grasp the economics of the situation.

A number of pending reform bills and proposals would expand health benefit coverage without attempting to control costs. The funding mechanisms attached to many proposals would require employers overall to increase their financial commitment to health care benefits. While the business community is concerned about access and quality, it believes those dimensions must be balanced against cost.

Private Markets

Consider that in 1940, fewer than 10 percent of Americans had health insurance, while in 1980, more than 80 percent of Americans had some type of health coverage. This growth in health care coverage underscores the tremendous change that has occurred in the financing of health care in the nation's recent history. Americans now seem to accept the notion that quality health care should be available to all, regardless of one's ability to pay. But unlike other nations that nationalized their health care systems to distribute health care "rights"

to citizens, the United States has largely maintained the private-market-based system in health care. More specifically, America has maintained private-market financing of health care.

**"Businesses claim
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Problems with the nation's health care system are obvious to all. There is general agreement that it is not working. The health care system is so complex that it is impossible to estimate with any certainty who pays what or what any level of payment buys. Taxpayers, consumers, stockholders, and employees can be sure that their own health care bills, tax payments, or daily purchases contain some component of other peoples' health costs. Confusion arises because the answer to the question "Who actually pays for health care?" is different from the answer to "Who writes the checks?" Because of the stakes involved, business leaders are focusing on who is paying for what, in hopes of demonstrating to policymakers that business pays more than is widely acknowledged. That way, they say, America can balance today's social interests with its long-term economic interests.

Shouldering the Load

Whether or not the current financing system should be maintained is open

to debate. Why? Because considerable confusion exists over who is paying the nation's health care tab. This may seem an odd proposition because there are ample statistics indicating who is writing the checks for the care being provided. America's national health care expenditures totaled \$540 billion in 1988. The federal government's expenditures equaled 29.17 percent of the total and were related largely to Medicare and the federal portion of Medicaid, but they also included expenditures for other federal health benefit programs that provide care for military personnel, veterans, and others. State and local government expenditures, at 12.89 percent of the total, were largely for Medicaid. Out-of-pocket expenditures, which are direct payments that consumers make for services, prescriptions, etc., accounted for 20.98 percent of total U.S. health care spending. Private insurance, at 32.37 percent of the total, was the biggest financier of health care in the United States, and of the amount financed through insurance programs, slightly more than 80 percent was provided through employer-sponsored benefit programs. Other private expenditures, the largest element of which is philanthropic contributions, accounted for the remaining 4.6 percent of all health care spending.

The confusion over who is paying America's health care bill is related to the fact that only about one-fifth of all expenditures are direct out-of-pocket payments for services provided. The rest is financed through other arrangements affecting different segments of society. Federal payments are largely composed of Medicare and Medicaid. The Hospital Insurance portion of Medicare is financed through a payroll tax.

The Supplementary Medical Insurance (SMI) portion of Medicare is financed through participant premiums and general revenue infusions, the largest source of which is from personal and corporate income tax collections. General revenues fund the federal share of Medicaid. The state's share is funded in a variety of ways depending on each state's approach.

In the case of employer-provided health insurance benefits, some argument exists over who pays the cost. Given the concerns that employers have been voicing about health cost increases and the liabilities they face for retiree benefits, it is clear that employers believe they are absorbing some of the health cost burden. Alternatively, Princeton University health economist Professor Uwe Reinhardt argues in the Winter 1989 issue of *Health Affairs* that this is not so. He contends that employers are not that adversely affected by health benefits cost increases because the costs are part of the wage bill. As health benefits costs have increased, he argues, escalation in other elements of the wage bill have been retarded. He also says that investors in capital markets already have looked through the veil of accounting rules and considered retiree health liabilities in assessing the value of companies.

Resolving the question of who pays for health benefits cost increases is of more than academic interest because it implies different strategies for responding to the problem. Business leaders have argued that one result of high health care costs is that many American industries are at a competitive disadvantage when compared with their international competitors. Competing nations finance national health care through general tax revenues, whereas the United States funds much of its health care through business. The incidence of health benefits cost increases have to fall on the employer in the form of reduced profits, the worker in the form of reduced compensation of other sorts, the buyer of the good or service in the form of higher prices, or some combination of these. Controlling benefits cost increases is less

Table 1

Methods of covering cost increases in employer-sponsored health benefits programs

	Percent
Benefits cost increases are passed along to consumers as price increases	14.8
Benefits cost increases reduce profits alone	9.8
Benefits cost increases hold down other forms of compensation to workers	11.2
A combination of lower profits and price increases	26.3
A combination of lower profits and reduced wages	6.0
A combination of price increases and reduced wages	2.7
A combination of all three	29.1

Source: The Wyatt Company, *Management USA: Leading a Changing Work Force*, 1990.

a concern to a plan sponsor who can pass the cost back to the worker or on to the buyer than to a plan sponsor who must absorb the cost in the form of lower profits.

While perception is not always consonant with reality, it may be a great motivator even when it is wrong. To learn executives' perceptions, and perhaps their motivations, when dealing with health benefits programs, The Wyatt Company asked executives in the *Management USA* survey, "How does your company try to cover increases in the costs of employer-sponsored health benefit plans?" Their responses are shown in Table 1. A substantial majority, 64 percent, believe the burden of health benefits cost increases is shared. Among the respondents, 73 percent believe that at least some cost increases are passed on in the form of lower wages; 71 percent believe that they reduce profits; 49 percent believe they reduce other forms of compensation; but only 11 percent think that the *full* burden falls on workers through reductions in other elements of the compensation package. Clearly, employers believe they have a vested interest in America's national health care problems. In that light, they are particularly concerned about

the inflation of health care costs and its effects on profitability.

Shouldering An Ever-heavier Burden

Recent estimates suggest that the United States is converting 1 percent of its gross national product to the delivery of health care services every 30 months. The magnitude of the increases in health benefits plan costs has been staggering. The cost of health benefits per employee has tripled over the last 10 years, averaging about \$3,000 per worker in 1990. U.S. businesses are now laying out the equivalent of about one-quarter of their net earnings for these benefits. In The Wyatt Company's *Management USA* survey, business executives identified health care benefits as the most important human resource issue they expect to face this decade. Problems with their medical benefits programs ranked well ahead of other concerns, including foreign competition, lack of qualified workers, environmental concerns, worker productivity, and government regulation.

In recent years, employers have tried various techniques to manage costs. These include using managed care programs and utilization review

and implementing various forms of cost shifting. While some of these changes have reduced costs to employers, the reductions have continually been buffeted by the systemic inflation in our national health delivery system.

Some executives fear that the burden of health care costs places U.S. companies at a competitive disadvantage. A widely cited *New York Times* article in 1989 quoted Chrysler Chairman Lee Iacocca as saying that the price of every Chrysler car included \$700 of medical benefits costs, while major European competitors had only half that amount, and the Japanese only a third. This means that if the rest of the competitive playing field were level, U.S. carmakers would be at a substantial cost disadvantage compared with the major international competitors because of health benefits costs.

In the long run, economic theory says that for many goods, the higher cost of health care as a business expense cannot be passed along through higher prices. America's main economic competitors—Japan, Germany, France, England, etc.—have all organized their mechanisms for purchasing health care differently than we have. Comparing U.S. health care expenditures with those of its major economic peers puts the American experience in a broader context. Table 2 shows the share of gross domestic product (GDP) dedicated to health care expenditures by the 10 largest Organization for Economic Cooperation and Development (OECD) countries in 1975 and 1989, and the compounded annual growth in GDP spent on health care in between those two years. During 1975, the United States spent 8.4 percent of its GDP on health care, more than any of the largest OECD countries on the list, and 29 percent more than the average level of spending by all the OECD countries. By 1989, the United States was spending 11.8 percent of its GDP on health care, 55 percent more than the average OECD expenditure. Even though the United States started with the highest level of health care expenditures, it also realized the highest growth rate during the period. The growth rate in the

Table 2

Total health expenditures as a percent of gross domestic product for selected Organization for Economic Cooperation and Development countries

Country	1975	1989	Annual Growth Rate
Australia	5.7	7.0	1.5
Canada	7.3	8.7	1.3
France	6.8	8.7	1.8
Germany	7.8	8.2	0.4
Italy	5.8	7.6	1.9
Japan	5.5	6.7	1.4
Netherlands	7.7	8.3	0.5
Spain	5.1	6.3	1.5
United Kingdom	5.5	5.8	0.4
United States	8.4	11.8	2.5
Mean, all OECD countries	6.5	7.6	1.1

Data from 1975 and 1989 taken from Economic Cooperation and Development, *Health OECD, Facts and Trends* (forthcoming) as presented by George J. Schieber and Jean Pierre Poullier, "International Health Spending: Issues and Trends," in *Health Affairs*, Spring 1991, p. 109. The growth rates shown in the table were calculated by the author.

share of GDP spent on health care in the United States over the 14-year period was twice the average for all OECD countries.

How Business Pays Extra for Health Care

In addition to coping with general inflation in health costs, employers also believe they are paying a hidden tax that is causing the cost of benefits to soar. This "tax" is "cost shifting" from public to private health plans. An implicit social policy for some time, government-initiated "cost shifting" has been growing as a source of irritation to businesses over the last few years, but it is only now beginning to gain widespread attention outside the employer community. For instance, last month, the

Prospective Payment Assessment Commission, a congressionally appointed commission charged with monitoring Medicare's Prospective Payment System, released a report detailing the impact of cost shifting. Among its findings:

- cost shifting, defined as cross subsidization, clearly exists;
- on average, private payers pay 128 percent of costs, while Medicare pays 91 percent and Medicaid only 74 percent;
- the average hospital generates a \$3.3 million yearly profit from private payers, and nearly \$2 million in losses from Medicare and Medicaid; overall, the average hospital will make \$800,000 in profits;
- the burden of uncompensated care is spreading.

Pay or Play Bills

Rep. Dan Rostenkowski (D-Illinois). H.R. 3205 would require employers to provide employees with a minimum package of health insurance benefits or pay an excise tax. The tax would fund a public plan similar to Medicare, which would cover employees whose firms choose to pay the tax, as well as individuals not covered through the work force. Whatever portion of the public plan that is not paid for by the excise tax would be financed through a combination of a health surtax imposed on the income of corporations and individuals, plus hikes in Medicare's wage-based tax. The legislation includes a process for setting provider fee caps.

Sen. Jay Rockefeller (D-West Virginia)/Rep. Henry Waxman (D-California). Based on recommendations from the Pepper Commission, S.1177 and H.R. 2435 would require businesses with 100 or more employees to provide health insurance coverage for their workers or contribute to a public plan. Employers would have to provide the coverage by either purchasing coverage from a reformed private insurance market or by paying a premium set as a percentage of payroll.

Sen. George Mitchell (D-Maine). S. 1227 would require employers either to provide employees

with a minimum level of health care benefits or to contribute a percentage of payroll to "AmeriCare," a public insurance system that, except for long-term care expenses, would replace Medicaid. Provider payments would be capped if a panel of negotiators can agree.

Single-payer Legislation

Rep. Peter Stark (D-California). H.R.650 would create MediPlan, a billion-dollar national health care program that would be funded by a 2 percent tax on gross income, plus contributions from employers and employees. Benefits would be similar to those that the elderly receive under Medicare.

Rep. Mary Rose Oakar (D-Ohio). H.R.8 would create a federal program administered by the states. This program would allow all residents and U.S. citizens to enroll and would replace Medicaid. Each state would be responsible for financing and implementing the comprehensive health care plan.

Rep. Marty Russo (D-Illinois). H.R.1300 would provide all Americans with a package of basic health benefits. No copayments or deductibles would be required, and participants could select their physicians. Financing would occur through a 6 percent payroll tax on employers and an increase, from 34 percent to 38 percent, in the corporate income tax

for businesses with more than \$75,000 in profits.

Sen. Bob Kerrey (D-Nebraska). S.1446 would replace Medicare, Medicaid, and health programs for military personnel and civil servants. Families and individuals would pay a \$100 deductible, a copayment for each office visit, and up to 20 percent of the cost of each procedure. Out-of-pocket costs would not exceed \$2,000 per family.

Small Group Health Insurance Market Reform

Sen. Lloyd Bentsen (D-Texas)/Rep. Dan Rostenkowski (D-Illinois). S.1872 and H.R.3626 would extend permanently the current tax deduction for health insurance costs of self-employed individuals and increase the deduction from the current level of 25 percent to 100 percent. Minimum standards would be imposed for health insurance sold to small employers with between two and 50 employees. Insurers could not cancel policies because of claims experience or worker health status. Annual premium increase amounts would equal the increase in the lowest premium charges to small businesses, plus 5 percent.

Sen. Dave Durenberger (R-Minnesota). S.700 would aid small employers in providing coverage for their workers by guaranteeing the issu-

What is Cost Shifting?

Hospitals provide a substantial amount of service that is either not paid for at all—"uncompensated care"—or only partially paid for—"undercompensated care." It is generally agreed that cost shifting occurs when one group of patients pays less than the provider-estimated cost of treatment, and the revenue shortfall is recouped by charging another group of patients an amount greater than the cost of treatment.

Since the early 1980s, only about 30 papers and articles have been published about health care cost shifting, with no widespread agreement on

what constitutes cost shifting and how it occurs. What divides researchers on the issue is not that different groups pay different prices for the same service: they do. What divides researchers is the reason *why* some groups pay more for a given service than do others. Some researchers argue that if one group pays more than another, it may not necessarily be a shifting of costs, but rather perfectly rational price-discrimination behavior by hospitals that have enough market power to dictate different prices to different buyers. Although hospitals vary widely in their market power, hospitals of all different sizes and geographic areas have demon-

strated their market power as evidenced by their ability to shift costs between groups of payers.

Looking at the existence of price differentials another way, it could be that some purchasers of health care are "better" consumers than others: they are wiser or stronger, so they strike better bargains. However, the semantics that economists use to describe "cost shifting" are unimportant to the businesses that bear cost shifting; business executives believe they are paying more than their fair share.

For several reasons in times past, the provision of uncompensated care did not affect any one group particu-

ance of policies, limiting an insurer's ability to restrict coverage because of preexisting conditions, and restricting experience rating and limits on annual increases in premiums. Insurers also would be required to make "Medplans," two tailored benefit packages, available to small employers. Both plans would be exempt from state benefit mandates.

Rep. Nancy Johnson (R-Connecticut). H.R.1565 would create an affordable package of basic benefits (hospital, medical, surgical, and some preventive benefits) for employers with between three and 25 employees. Companies that sell small employer health insurance programs would have to offer the package to all small companies that apply, and no individual within that group could be rejected.

Sen. John Chafee (R-Rhode Island). In addition to limiting health care costs for small businesses by reforming the small insurance market, S.1936 also would aid in the purchase of health insurance by providing a \$1,200 tax credit to families earning less than \$32,000 a year, or a \$600 credit for individuals earning less than \$16,000 a year. The legislation also would create four new business tax credits so that employers would be more inclined to provide health insurance.

larly adversely. First, medical care was much less costly than it is today. Costs have risen for many reasons (two frequently cited reasons are advances in technology and increased demand for, and utilization of, health care services). Second, the number of uninsured and underinsured has risen steadily during the past decade. Currently, about 35 million Americans have no health insurance, and perhaps another 35 million are underinsured. Because this same group of Americans may find it difficult to pay for routine and preventive services, they are likely to enter the health care system with advanced-stage illnesses requiring greater

medical resources for treatment. A self-perpetuating cycle is at work in the system.

Finally, the number of groups able or willing to absorb the financial impact of uncompensated care has declined. Those who continue to shoulder the burden are left with a disproportionate share. Because Medicaid and Medicare are now part of the problem of cost shifting—no longer paying their own way—private-sector groups are the payers of last resort. And even within the private sector, there are far fewer businesses on which to spread the burden. Increasing numbers of companies now participate in managed care networks, whose rate-setting structures minimize the financial burden imposed by uncompensated care. As managed care becomes more widespread, this will leave only the remaining segment of employers and individual self-payers to shoulder the entire burden of uncompensated care.

As a consequence, many business executives believe they are justified in arguing that they pay more than their fair share and that their economic position is likely to get worse before getting better.

Financing Health Care Reform

Given the current political climate, it is not surprising that many reform proposals avoid financing from broad-based personal income tax. Instead, combinations of the following tax mechanisms are proposed to pay for reform: increasing payroll tax, increasing the marginal corporate tax rate, eliminating tax-free status of employee health benefits, capping the deductibility of health benefits for employers, including a value-added tax, and increasing taxes of the most profitable firms and high-income individuals. Also, many proposals call for financing "through the tax system," implying that some income tax would be involved. Other funding mechanisms involve cost-sharing between firms and individuals and employer funding with tax relief attached.

A number of policy analysts are eager to eliminate the tax-free status

of health benefits. First, it is a relatively painless source of money, and second, they believe this "tax subsidy" is largely responsible for the inflation in today's health care system. For instance, in June, Northwestern Economics Professor Burton Weisbrod wrote: "Throughout the postwar period the expansion of private health care insurance has been spurred by federal tax policy. By making employer-financed health insurance nontaxable income to employees, federal policy distorted worker choice between health insurance and cash wages, encouraging excessive health insurance."

And in December, Nobel Laureate Milton Friedman agreed in his briefing paper, "Input and Output in Medical Care," that employer-provided health benefits should be treated as taxable income for employees—but deductible for employers—for two reasons. First, echoing Weisbrod, he argues that tax policy has encouraged Americans to take a larger fraction of their total remuneration in the form of health care than they would have if health benefits had the same tax status as other compensation. Second, Friedman believes that people would purchase health care services more efficiently if the current employer-based financing scheme were eliminated. He argues, "The employee is likely to do a far better job of monitoring health care providers in his own interest than is the employer."

According to the Official Budget for Fiscal Year 1992, the tax expenditure for "Exclusion of Employer Contributions for Medical Insurance Premiums and Medical Care" is estimated to be \$41 billion next year. Presumably, if the deductibility of health benefits for employers were eliminated, and employer-paid benefits were to be taxable to employees, then the Treasury would recover the full \$41 billion. Among current proposals, the Senate Republican Task Force on Health Care Reform's draft proposal would come closest to completely eliminating health benefits' tax-exempt status. It would cap deductibility of health benefits for employers and would make health benefits taxable for all except those

in the low- to middle-income range.

Other proposals that would change the tax status of health care benefits include: the Treasury Department Report (issued in March 1990); the American Medical Association's "Health Access America" plan (introduced in February 1990); the Heritage Foundation Proposal (released in 1989); and the Department of Health and Human Services Task Force (no formal proposal issued yet).

Employers believe that a closer look at who actually pays for health care is in order. If the expansion of the nation's health care system is funded through a tax on employer-provided health benefits, it may compound a burden that employers are already struggling to pay. A delicate balance exists between access, quality, and cost, and too little attention to any one of these dimensions could prove costly for not only the business community but society as a whole.

MM

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A Tale of Two Cities

Thomas A. Stolee, M.D.

Beverley Hawkins had a dream. Ray Christensen had a dream. With the help of others who shared their visions, they have realized their dreams and improved the lives of Minnesotans both urban and rural.

Having lived and practiced in St. Paul for five years, I have a strong personal attachment to our beautiful capital city, which, along with Minneapolis, has become a renowned cultural and business center. But not all of St. Paul's residents have been fortunate enough to benefit from education, wealth, or luck of the draw. Some are poor, some are homeless, some suffer from discrimination, some are sick, some feel hopelessness, some are chronically mentally ill.

In 1967, a Summit-University neighborhood initiative for the development of an area health clinic crystallized; a grant from the city brought about a van-based outreach program to provide medical care to those in need. Federal money was procured in 1969, and the program was named the Model Cities Health Center. Then, in 1977, Kansas City native Beverley Hawkins came along with a Ph.D. in educational psychology from the University of Minnesota. She had dream—to combat urban poverty.

The success of the Model Cities Health Center has grown with Dr. Hawkins' involvement in the project. In 1987, the center moved from the Dr. Martin Luther King Center into its highly functional, attractive home at 430 North Dale Street. Now, with four full-time-equivalent dedicated physicians, a knowledgeable staff, and volunteer support, the center provides health care to 14,000 people and runs a marvelous child-development facility.



"Minnesota physicians are taking the lead in battling problems of health care access."

Cromwell, Minnesota, is home to 227 people. The city was settled 110 years ago and over the years has been the center of a small agricultural area in Carlton County, populated by hard-working people mainly of Finnish descent.

The folks in Cromwell are rightfully proud of their school, which will be expanded in May; of their EMT-certified ambulance personnel; and of their nursing home with attached low-rent housing. However, the nearest physicians are 23 miles to the south in Moose Lake, 23 miles to the east in Cloquet, 44 miles to the west in Aitkin, and 18 miles to the north in Floodwood, where physicians are provided by an area medical clinic one day a week. Some people in and around Cromwell are too sick, old, and poor to travel for routine health care. The health care we take for granted is just not available to them.

Then Ray Christensen, M.D., came along. Dr. Christensen grew up

on a farm near Milltown and Centuria, Wisconsin. He understood the lack of ready access to health care for people in rural areas. He understood the hard life and uncertainties of agriculture. Ray Christensen also had a dream—to combat rural poverty. He found willing help in the Lake Superior Medical Society.

On January 29, the Rural Access Clinic opened in Cromwell. One evening a month, the clinic provides free health screening for the poor and uninsured from the area. Physicians from Moose Lake, Cloquet, Duluth, and Two Harbors work with nurses and technicians to provide exams, immunizations, and pediatric check-ups at no charge. The clinic is the brainchild of Dr. Christensen, who organized the resources of the Lake Superior Medical Society and its auxiliary, the Carlton County Health Services, the College of St. Scholastica, the University of Minnesota-Duluth School of Medicine, the Minnesota Center for Rural Health, the Duluth Family Practice Residency Program, and the Minnesota Medical Association.

Drs. Hawkins and Christensen are not just dreamers. They are leaders. They see a problem, understand its genesis, and marshal the support, talent, work, and enthusiasm needed to create a solution. Thankfully, there are other similar projects in Minnesota. Thankfully, Minnesotans care. Thankfully, Minnesota physicians are taking the lead in battling the problems related to health care access, health care costs, and rural health care, as well as problems of the poor. Let us continue to press forward in our concern and care for our less fortunate fellow humans. Let us continue to work together to make dreams come true.

MM

People and Places Making Medical News

People

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Riverside Staff Officers

Psychiatrist Ronald Groat, M.D., has been elected 1992 chief of staff at Riverside Medical Center. He is in practice with Clinical Psychopharmacology Consultants, P.A., of Minneapolis.

Kent Molde, M.D., is chief of staff elect; Gregory Amer, M.D., is secretary/treasurer; and Sandra Engwall, M.D., is past chief. Members at large are James Breitenbucher, M.D., Randall Schapiro, M.D., Kevin Kelly, M.D., and Daniel Zydowicz.

FHCE Officers

The Foundation for Health Care Evaluation elected Raymond Christensen, M.D., board chair at its annual board meeting. Christensen is a family practitioner from Moose Lake, Minnesota.

Burton Haugen, M.D., a family practitioner from Walker, Minnesota, is FHCE's new chair of the Medical Standards and Practice Committee.

FHCE is a peer review organization under contract with the federal government to review the health care services rendered to Medicare beneficiaries in Minnesota.

Modern Healthcare's Trustee of the Year

Modern Healthcare magazine, a health industry business news weekly, named Roger P. Foussard "Trustee of the Year." Foussard chairs HealthEast's board and Foussard Associates, a St. Paul management consulting firm.

According to *Modern Healthcare* Editor Clark W. Bell, the award is in "honor of the diligence and determination of hospital governing boards." Candidates for the trustee award must have helped improve the quality of care in their communities, as well as the financial stability of their institutions. Foussard was central in HealthEast's recent financial turnaround. The hospital system lost \$35 million in 1988 and \$21 million in 1989. Foussard led the organization through a major turnaround that left HealthEast with surpluses of \$3.9 million in 1990 and \$8 million in 1991.

National Diabetes Committee Chair

Donnell D. Etzwiler, M.D., president and founder of the International Diabetes Center in St. Louis Park, recently became chair of an ad hoc committee on diabetes mellitus for the American Academy of Pediatrics. The committee will address the postgraduate education of practicing general pediatricians in the field of diabetes.

Etzwiler is a clinical professor at the University of Minnesota Medical School, co-director of an international diabetes program with the countries of the former Soviet Union, and a pediatric diabetes specialist at Park Nicollet Medical Center. He is also past president of the American Diabetes Association and former commissioner of the National Commission on Diabetes.

New Goodwill/Easter Seal Board Member

Linda Krach, M.D., medical director of Rehabilitation at Gillette Children's Hospital in St. Paul, has been named to the board of directors of the St. Paul-based Goodwill Industries, Inc./Easter Seal Society of Minnesota, which

serves as a dual local affiliate of both Goodwill Industries of America and the National Easter Seal Society.

Nurse Executives' President-elect

Christine Milbrath, R.N., of St. Paul, was recently named president-elect of the Twin Cities Organization of Nurse Executives. Milbrath is the vice president of patient services at Gillette Children's Hospital in St. Paul.

Healy to Speak at Symposium

Bernadine Healy, M.D., director of the National Institutes of Health, will be the keynote speaker at an all-day breast cancer symposium sponsored by Abbott Northwestern Hospital's Virginia Piper Cancer Institute. Healy will discuss women's rights regarding effective screening and care for breast cancer. The symposium, called "Breast Cancer: Issues in Prevention and Cure," will be held April 24 from 8:30 a.m. to 4:30 p.m. at the Minneapolis Convention Center. The public is invited to attend Healy's 1 p.m. address at no charge.

Cosponsors for the program are WomenCare and the Office of Continuing Medical Education of Abbott Northwestern Hospital, the University of Minnesota School of Public Health, and the Minnesota Department of Health. For information, call 612/863-5461.

Places

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Cromwell Clinic Offers Free Care

A free health care clinic in Cromwell, Minnesota, attracted 33 patients its opening evening, January 29. The Rural Access

Clinic, which will be offered at Cromwell High School the last Wednesday of each month for at least a year, is intended to help address rural barriers to health care access, including lack of insurance, distance from medical facilities, and a need for extended hours.

A team of more than two dozen volunteer health care professionals, including seven physicians, saw patients with a variety of complaints that ranged from an earache to chronic stomach problems.

The Lake Superior Medical Society initiated the clinic and has enlisted the help of a number of organizations, including the Minnesota Medical Association, the College of St. Scholastica, the University of Minnesota-Duluth School of Medicine, the Minnesota Center for Rural Health, and Carlton County Health Services (see this month's President's Letter, page 41).

Sisters of Carondelet Establish Clinics for Poor

The Sisters of St. Joseph of Carondelet opened a health care clinic for the poor on January 30. It's the first of what they hope will be 20 clinics in Twin Cities neighborhoods. St. Mary's Health Clinic, located in the Northside Child Development Center at 1011 14th Avenue North in Minneapolis, will focus on immunizing children and treating children with chronic ear infections, asthma, and nutritional problems, said Mary Madonna Ashton, former state health commissioner and president and chief executive officer of Carondelet LifeCare. As *Minnesota Medicine* went to press, the sisters were planning to open a second clinic in late February or early March at a center for women and children located in the old Crosby home at 2104 Stevens Avenue South in Minneapolis.

Almost 70 physicians and nurses have volunteered to staff the

clinics, and hospitals have agreed to provide lab services and supplies at cost. Initially, patients will not be charged for services, but later the clinics will begin charging patients according to their ability to pay.

New Indian Clinic Opens in St. Paul

An American Indian Health Clinic recently opened in a former post office building on St. Paul's East Side. The clinic, which is not related to the former Urban Indian Health Clinic that closed in December 1990, will receive \$213,431 from the city, county, state, and St. Paul Foundation this year. The clinic charges patients who are above the poverty level on a sliding fee scale.

St. Paul Health Department Offers Free Screenings

The St. Paul Health Department is now offering free breast exams, mammograms, and Pap smears to women who cannot afford them. The program, called the Women's Health Screening Clinic, is being administered by the Minnesota Health Department and funded by the Centers for Disease Control in Atlanta. Minnesota is one of eight states to receive CDC funding for the screenings.

The St. Paul Health Department, which was selected to conduct the project because it has trained personnel and has a history of providing family planning services, is offering the clinics on the third Thursdays and last Tuesdays of every month at the Public Health Center, 555 Cedar Street, in St. Paul. The clinic is open to all eligible women regardless of where they live. The program will eventually be expanded to the rest of the state.

Abbott Opens Parkinson's Center

Abbott Northwestern Hospital has opened a Parkinson's Disease Center at its Minneapolis Neuroscience Institute. The center is operated by neurologists Paul Silverstein, M.D., and Felix Zwiebel, M.D.

The center includes physicians, nurses, and experts from physical therapy, speech, occupational therapy, nutrition services, and social services. Patients receive a thorough evaluation to assist them and their families plan further care and treatment. The patient's family physician receives a taped account and written summary of the meeting.

Fairview Southdale Expands

James H. Zavoral, M.D., has joined Fairview Southdale Hospital to create the Preventive Cardiology Institute. Zavoral is known internationally for his heart disease prevention research and treatment.

The purpose of the institute is to prevent or halt the progression of heart disease and, in some cases, to reverse it. It will focus on two groups of patients: 1) those who do not have the disease but have its risk factors and 2) those who have the disease and who may have had a heart attack or other symptoms or who have had treatments such as bypass surgery or angioplasty.

Fairview Southdale has recently completed a major expansion of its Emergency Department and adjacent areas. The \$4.5 million project responds to increasing numbers of people seeking emergency care and to changing technology. The hospital added 6,300 square feet to the emergency area and remodeled 13,200 square feet of space for an enlarged surgery admissions and urgent care center area.

Clinic Starts Local Stroke Chapter

Stroke victims and their families will soon have access to services including a stroke information line, research updates, and support groups through the newly formed Minnesota chapter of the National Stroke Association, sponsored by

Noran Neurological Clinic with offices in Minneapolis, Fridley, Burnsville, and Edina.

The group will also offer stroke-prevention education programs to high-risk groups and will offer health care providers information about developments in stroke prevention and treatment.

Noran Clinic is providing staffing, medical counsel, and facilities to start the local chapter, which will operate as an independent, nonprofit organization.

Socioeconomics

LifeSpan and Health One to Consolidate

LifeSpan Inc. and Health One Corp. announced in January that they will merge, creating the area's largest hospital organization. The consolidation will combine the assets of Health One, including United Hospital in St. Paul, Mercy Hospital in Coon Rapids, and Unity Medical Center in Fridley, with LifeSpan and several of its controlled organizations, including Abbott Northwestern Hospital and LifeSpan's outstate affiliates. The consolidation is subject to federal approval.

LifeSpan's Minneapolis Children's Medical Center and Health One's Children's Hospital of St. Paul will not be included in the merger but will pursue a possible relationship of their own. Children's in St. Paul shares a building and services with United and will remain associated with the hospital in a wide variety of joint clinical programs. Methodist Hospital, a member of LifeSpan, is expected to pursue an affiliation with Park Nicollet Medical Center and will not participate in the consolidation.

Conley Brooks, chair of the LifeSpan board of directors, said, "Our vision is to create an integrated, regional health care system that can more efficiently act on a

commitment to deliver high-quality services at the lowest possible cost. And that will benefit not only patients, but employers, payers, physicians, and the entire community, as well."

The new organization will include 13 hospitals in Minnesota and western Wisconsin, will consist of 2,600 beds, and will employ approximately 15,000 people. The combined organizations will have assets in excess of \$825 million and a net worth (general fund balance) of more than \$275 million.

Mayo Establishes Practice in Iowa

Mayo announced in February the establishment of a regional practice in Decorah, Iowa, affiliating with Decorah Medical Associates, P.C. The facility will remain a family practice clinic, providing general health care to patients in and around Decorah. Under the agreement, Decorah Medical Associates' physicians will become employees of Mayo Regional Practices, P.C., an affiliate of Mayo Foundation for Medical Education and Research. The practice will be renamed Decorah Clinic, P.C.—A Mayo Regional Practice.

Medical Associates has had a long-term working relationship with Mayo, which currently offers cardiovascular and ear, nose, and throat care to Medical Associates' patients. Mayo Medical School students also complete a portion of their training at the clinic.

HMO Council Spearheads Immunization Project

The Minnesota Council of HMOs announced in February that it will spearhead a childhood immunization project designed to raise the immunization rates of Minnesota's 2-year-old children to 90 percent or more by the year 2000. Recent Department of Health statistics indicate that less than 60 percent of Minnesota children receive the complete series of immunizations by age 2.

To reach this goal, the council has created a task force to work with public and private health

organizations throughout the state to educate consumers and health care professionals about the importance of childhood immunization. The HMO task force will also study current immunization rates throughout the state, identify specific reasons why Minnesotans don't immunize their children, and then develop strategies to help consumers and health care professionals overcome these barriers.

Numerous organizations throughout the state have committed to working with the HMO Council in these efforts, including the Minnesota Medical Association, the Minnesota Department of Health, the Minnesota Hospital Association, the Minnesota Nurses Association, Children's Hospital of St. Paul, and Minneapolis Children's Medical Center.

Twin Cities Employers Pay Less for Medical Plans

Twin Cities employers pay less than the national average for employee medical plans, but their costs increased more than the national average in 1991, reports Foster Higgins, an international employee-benefits consulting firm. Twin Cities companies paid \$3,141 per employee in 1991 compared with the national average of \$3,605. The percentage increase from 1990 to 1991 was 16 percent in the Twin Cities compared with 12 percent for the nation. Ann Robinow, a spokesperson in the firm's Twin Cities office, said the difference might be due to changes in sampling; the company surveyed 128 Twin Cities employers in 1991 compared with 38 in 1990. The figures include indemnity plans, HMOs, dental plans, and vision and hearing plans.

St. Paul Acts to Cut Infant Mortality

Roy Garza, former head of the St. Paul Community Services Department, has been hired by the St. Paul Public Health Division to improve the city's infant mortality

rate. In his temporary position, he will find ways to improve existing city programs aimed at pregnant women at high risk of having babies that might die during their first year of life.

In 1989, St. Paul had an infant mortality rate of 11.2 deaths per thousand births. Blacks in the city had a rate of 21.2. Statewide, the rate was 7.1 overall and 18.1 for blacks. Garza said his goal is to reduce the city's total rate to 8.9 by 1995.

Fifth Ward Council Member Janice Rettman, chair of the council's finance committee, questioned whether Garza's appointment is the best use of city money. "Infant mortality is a very serious concern, but if they're moving money from people directly helping parents of these kids, I'm going to be very concerned about whether this allocation is proper," she said in a January 7 *St. Paul Pioneer Press* article.

Innovations

Mayo Uses Laparoscopy in Place of Chest Surgery

Mayo Clinic physicians have adopted laparoscopic techniques to chest surgery and, as a result, have avoided opening the chests of about 120 patients since they started using the procedure last June. They have used laparoscopic surgery for patients who need small nodules removed from their lungs or fluid drained from their chest cavities.

Mark Allen, M.D., one of four thoracic surgeons using the technique at Mayo Clinic, said patients undergoing the procedure experience little postoperative pain and recover more quickly than with traditional chest surgery. For example, traditional surgery requires a week of hospitalization and six weeks of recovery at home. With the new procedure, patients leave the hospital after two or three days and can resume normal activity within two weeks. Patients

undergoing the new procedure experience about 1 percent of the pain associated with traditional surgery, according to Allen.

FDA Panel Tentatively Approves Condom for Women

An expert panel of the Food and Drug Administration tentatively recommended approval February 1 of the first condom designed for women. The panel approved the condom for use in disease prevention, noting that approval of contraceptives is a longer process.

The new condom, called a vaginal pouch, is a polyurethane sheath that lines the vagina. It is held in place by two flexible plastic rings, one at the cervix and one outside the body.

The panel asked the manufacturer, Wisconsin Pharmacal Co., to complete several studies on the female condom before the FDA begins its formal approval process. The panel members questioned some of the manufacturer's claims about the condom's effectiveness in preventing the spread of sexually transmitted diseases and in preventing pregnancy.

Preliminary results show that if 1,000 American women used the female condom for six months, 104 would get pregnant, a rate comparable with diaphragms and other barrier contraceptives, said Mary Ann Leeper, senior vice president of Wisconsin Pharmacal. Leeper anticipates that the condom will be approved by the end of the year.

Ortho to Develop Birth-control Vaccine

Ortho Pharmaceutical Corp., a Johnson & Johnson subsidiary, plans to develop a contraceptive vaccine that causes women to become immune to sperm. The vaccine, which is currently being tested on baboons, makes the immune system produce antibodies

to a protein molecule found on the head of sperm. The antibodies bind with sperm, making them unable to fertilize an egg.

The vaccine would come in the form of an injection or pill and would last from two to five years. It won't be tested on humans for at least two years, said John Herr, the University of Virginia researcher who created the vaccine and is directing its testing.

Medical Research

Mayo Frees Patients from Ventilator

Mayo Clinic researchers report a nearly 90 percent success rate with a new program that frees hospitalized patients from their dependence on artificial ventilators.

The study, published in the February issue of *Mayo Clinic Proceedings*, reports on the first 18 months' experience with the program, set up to rehabilitate patients who have become dependent on ventilators while being cared for in an intensive care unit. Eighty-seven percent of the 61 patients treated were weaned of their dependence and were able to return to their homes or a local care facility. The cost of caring for these patients was significantly reduced; the daily cost per patient averaged \$600 less than for treatment in the ICU.

Key to the success of the Mayo program, according to Douglas Gracey, M.D., a pulmonary specialist at Mayo Clinic and the main author of the report, is removing patients from the intensive care unit to a unit where they can get more specialized attention. The six-bed specialized unit uses a team approach involving nursing, physical therapy, respiratory therapy, dietetics, and a variety of medical specialists. A critical factor is having nurses experienced in treating patients with ventilator dependence, Gracey said.

The program focuses on removing tubes from patients as soon as possible, cutting down on multiple medications, building

patients' strength, and restoring good nutrition, sleep habits, and family support.

Mayo's Ventilator Dependence Unit, located at Saint Marys Hospital, is one of four such units in the United States being funded by the Health Care Financing Administration as a demonstration project.

Deaths from Ectopic Pregnancy Fall

Fewer women are dying from ectopic pregnancy even though the number of such pregnancies has increased dramatically since 1970, reports a Mayo physician in the January 22 *Journal of the American Medical Association*. While the number of ectopic pregnancies increased from about 17,800 in 1970 to about 88,000 in 1987, only 30 women died from it in 1987. At one time, ectopic pregnancy claimed up to 70 percent of its victims, said Steven Ory, M.D., author of the report and chair of the reproductive endocrinology and infertility section of Mayo Clinic's ob/gyn department.

The decreased mortality is a result of better treatment and earlier diagnosis, said Ory. Using a new pregnancy test that is 99 percent accurate, physicians are able to detect such pregnancies in women at high risk before serious complications develop.

Physicians are uncertain why the number of ectopic pregnancies has increased every year but one since 1970, but they believe the rise is related to the increase in sexually transmitted diseases, more conservative surgical procedures that allow women who have had an ectopic pregnancy to conceive again, and greater use of fertility treatments, said Ory.

'U' Researchers Conduct AIDS Survey

In a survey involving more than 300 house calls, University of Minnesota researchers found that people are willing to fill out sexually explicit questionnaires on AIDS risks, although they are reluctant to give blood samples.

The results suggest that a broader, national survey could be successfully completed, said the researchers in the *Journal of the Public Health Service*.

The 1989 survey, which researchers stress does not include a representative sampling of Twin Cities residents, involved visits to homes in a middle-class area of a St. Paul suburb and a working-class area in south Minneapolis without regard for the residents' lifestyles. Researchers asked one adult at each home to fill out the confidential survey; only 10 percent of the men and 6 percent of the women refused. Half of the respondents were asked to give a blood sample for AIDS testing but only 72 percent agreed; none was found to have the AIDS virus. Twenty-five percent of the men and 19 percent of the women said that as a result of the AIDS epidemic, they have made changes in their sexual practices, including having fewer sex partners, using more care in selecting partners, and using condoms more often.

'U' Studying Osteoporosis

The University of Minnesota is participating in the largest study ever of osteoporosis and is recruiting 600 women to participate. Researchers at the university and 10 other medical centers nationwide plan to study the effectiveness of the experimental drug alendronate on 6,600 women over four years. Alendronate, which has not received FDA approval for general use, slows bone loss by creating a protective layer over bone-absorbing cells, said Kristine Ensrud, M.D., co-principal investigator with Richard Grimm, M.D., at the university. The drug's only side effect is an occasional upset stomach associated with high dosages.

Women who wish to participate must be between 55 and 80 years old and must have low bone density, said Ensrud. For information, women should call 612/336-5512.

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A Calendar of Continuing Medical Education Courses

Provided through the MMA Medical Education Subcommittee on CME Resources. For assistance with scheduling meetings or for information on future medical meetings and CME courses, please contact the MMA office: 2221 University Avenue SE, Suite 400, Minneapolis, Minnesota 55414; 612/378-1875. Information for each entry is arranged by date; name of program; primary sponsor; location; contact person.

MARCH 1992

March 6 **The Duluth Clinic 1992 Family Practice Conference** The Duluth Clinic; Fitger's Spirit of the North Theatre, Duluth, MN. CONTACT: Rockie Odberg, CME Office, 400 East Third Street, Duluth, MN 55802; 218/725-3838.

March 6-7 **Cutaneous Laser Surgery** Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

March 9-13 **Medical Update 1992** Office of CME, Department of Surgery, University of Minnesota Medical School; Hughes Education and Conference Center, Holy Cross Hospital, Fort Lauderdale, FL. CONTACT: Becky Noren, Office of CME, Radisson Hotel Metrodome, Suite 107, 615 Washington Avenue SE, Minneapolis, MN 55414; 612/626-7600, or 800/888-8642.

March 11-14 **Geriatric Medicine Review** Office of CME, University of Minnesota Medical School; Park Inn International, Minneapolis, MN. CONTACT: Registrar, Office of CME, 615 Washington Avenue SE, Minneapolis, MN 55414; 612/626-7600.

March 12-13 **Family Practice Today** St. Paul-Ramsey Medical Center; Holiday Inn East, St. Paul, MN. CONTACT: Bonnie Young, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

March 13-18 **Neurology in Clinical Practice** Mayo Clinic/Mayo Foundation; Capiva, FL. CONTACT: Rita Kunz or Jan Fleck, Mayo Clinic, 200 1st Street SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

March 14 **Ob/Gyn Seminar** Group Health Inc.; Minneapolis Metrodome Hilton, Minneapolis, MN. CONTACT: Debbie Bladine, Group Health Inc., 2829 University Avenue SE, Minneapolis, MN 55414; 612/623-8479.

March 16-20 **Team Management of Diabetes Mellitus** International Diabetes Center; International Diabetes Center, Minneapolis, MN. CONTACT: Cindy Poppitz, International Diabetes Center, 5000 West 39th Street, Minneapolis, MN 55416; 612/927-3393.

March 19 **Common Skin Disorders** Group Health Inc.; Minneapolis Metrodome Hilton, Minneapolis, MN. CONTACT: Debbie Bladine, Group Health Inc., 2829 University

Avenue SE, Minneapolis, MN 55414; 612/623-8479.

March 20 **Annual Occupational Medicine Update** St. Paul-Ramsey Medical Center; Minneapolis Metrodome Hilton, Minneapolis, MN. CONTACT: Bonnie Young, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

March 20-21 **Advanced Laparoscopic Abdominal Surgery Seminar** Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

March 21-22 **Sexual Attitude Reassessment Seminars (SAR)** Program in Human Sexuality; Holiday Inn Metrodome, Minneapolis, MN. CONTACT: SAR Coordinator or Secretary, Program in Human Sexuality, FMC Building, 1300 South 2nd Street, Minneapolis, MN 55454; 612/625-1500.

March 26-27 **Critical Care: Practical Approaches & Case Discussion** St. Paul-Ramsey Medical Center; Holiday Inn East, St. Paul, MN. CONTACT: Bonnie Young, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

March 27-28 **Lasers in Orthopedic Surgery** Laser Center of Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Laser Center 39102, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-3000.

March 28 **Teen Program Seminar (Pediatric and Mental Health Topics)** Group Health Inc.; Minneapolis Metrodome Hilton, Minneapolis, MN. CONTACT: Debbie Bladine, Group Health Inc., 2829 University Avenue SE, Minneapolis, MN 55414; 612/623-8479.

March 29-April 1 **Management Strategies in Complex Congenital Heart Disease** Mayo Clinic/Mayo Foundation; Phoenix, AZ. CONTACT: Postgraduate Courses, Mayo Clinic/Mayo Foundation, Section of Continuing Education, 200 1st Street SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

APRIL 1992

April 2-3 **Allergy and Clinical Immunology** Office of CME, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of CME, Radisson Hotel Metrodome, Suite 107, 615 Washington Avenue SE, Minneapolis, MN 55414; 612/626-7600.

April 2-3 **Annual Obstetrics and Gynecology Update** St. Paul-Ramsey Medical Center; Holiday Inn East, St. Paul, MN. CONTACT: Bonnie Young, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

April 3 **ENT Update** St. Paul-Ramsey Medical Center; St. Joseph's Hospital, St. Paul, MN. CONTACT: Bonnie

Young, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

April 3 **Eighth Annual Duluth Heart Conference** The Duluth Clinic, Ltd.; Fitger's Spirit of the North Theatre, Duluth, MN. CONTACT: Thomas E. Elliott, M.D., 400 East Third Street, Duluth, MN 55802; 218/725-3755.

April 6-7 **Annual Ophthalmology Course** Office of CME, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of CME, Radisson Hotel Metrodome, Suite 107, 615 Washington Avenue SE, Minneapolis, MN 55414; 612/626-7600.

April 6-10 **Team Management of Diabetes Mellitus** International Diabetes Center; International Diabetes Center, Minneapolis, MN. CONTACT: Cindy Poppitz, International Diabetes Center, 5000 West 39th Street, Minneapolis, MN 55416; 612/927-3393.

April 8-10 **Annual Spring Refresher—Minnesota Academy of Family Physicians** Minnesota Academy of Family Physicians; Hyatt Regency Hotel, Minneapolis, MN. CONTACT: Virginia Barzan, Minnesota Academy of Family Physicians, 2221 University Avenue SE, Minneapolis, MN 55414; 612/331-2506.

April 10-11 **Advanced Laparoscopic Abdominal Surgery Seminar** Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

April 10-11 **Pelviscopic Surgery Including Laparoscopic Hysterectomy** Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Laser Center 39102, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-3000.

April 11 **Treatment of Renal and Ureteral Stones in the '90s** Minnesota Urological Society; St. Paul Hotel, St. Paul, MN. CONTACT: Jennifer Syltie, Minnesota Medical Association, 2221 University Avenue SE, Suite 400, Minneapolis, MN 55414; 612/378-1875 or 800/999-1875.

April 16 **Spondyloarthropathies** Group Health Inc.; Minneapolis Metrodome Hilton, Minneapolis, MN. CONTACT: Debbie Bladine, Group Health Inc., 2829 University Avenue SE, Minneapolis, MN 55414; 612/623-8479.

April 20-24 **Team Management of Diabetes Mellitus** International Diabetes Center; International Diabetes Center, Minneapolis, MN. CONTACT: Cindy Poppitz, International Diabetes Center, 5000 West 39th Street, Minneapolis, MN 55416; 612/927-3393.

April 24-25 **Lasers in Orthopedic Surgery** Laser Center of Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Laser Center 39102, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-3000.

April 24-25 **15th Annual Update in Clinical Cardiology** Abbott Northwestern Hospital; Location to be determined.

CONTACT: Minneapolis Heart Institute Foundation, 920 East 28th Street, Minneapolis, MN 55407; 612/863-3979.

April 24-25 **Sexual Attitude Reassessment Seminars (SAR)** Program in Human Sexuality; Holiday Inn Metrodome, Minneapolis, MN. CONTACT: SAR Coordinator or Secretary, Program in Human Sexuality, FMC Building, 1300 South 2nd Street, Minneapolis, MN 55454; 612/625-1500.

April 24-26 **First Annual Mayo Clinic Conference on Advances in Clinical Anesthesiology** Mayo Clinic/Mayo Foundation; Amelia Island Plantation, Amelia Island, FL. CONTACT: Postgraduate Courses, Mayo Clinic/Mayo Foundation, 200 1st Street SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

April 27-29 **Bone & Soft Tissue Tumors** Mayo Clinic/Mayo Foundation; Hilton Beach & Tennis Resort, San Diego, CA. CONTACT: Postgraduate Courses, Mayo Clinic/Mayo Foundation, 200 1st Street SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

April 29 **Orthopedic Challenges in Rheumatology** Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

MAY 1992

May 1-2 **Advanced Laparoscopic Abdominal Surgery Seminar** Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

May 2 **Interventional Radiology** Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

May 2 **1992 Perinatal/Neonatal Update** Abbott Northwestern Hospital and Minneapolis Children's Medical Center; Madden's on Gull Lake, Brainerd, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

May 4-8 **Family Practice Review and Update** Office of CME, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of CME, Radisson Hotel Metrodome, Suite 107, 615 Washington Avenue SE, Minneapolis, MN 55414; 612/626-7600.

May 12 **Gynecology and Gynecologic Oncology** Office of CME, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of CME, Radisson Hotel Metrodome, Suite 107, 615 Washington Avenue SE, Minneapolis, MN 55414; 612/626-7600.

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Our integrated, multispecialty, 21-member medical practice has positions available for BE/BC physicians in the areas of:

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- GENERAL SURGERY
- PEDIATRICS

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Alexandria Clinic, P.A.
610 Fillmore Street
Alexandria, MN 56308
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CONTINUING MEDICAL EDUCATION

ST. PAUL-RAMSEY MEDICAL CENTER

Spring Conference Schedule

1992	
March 12-13	Family Medicine Today, St. Paul
March 20	Occupational Medicine Update, Minneapolis
March 26-27	Critical Care: Practical Approaches & Case Discussions, St. Paul
April 2-3	Ob/Gyn Update, St. Paul
April 3	ENT Update for Family Physicians, St. Paul

Mark your calendar for these fall programs:

October 29-30	Practical Approaches to Managing Trauma, St. Paul
November 12-14	Strategies in Primary Care, St. Paul
December 3-5	Cardiopulmonary Medicine, St. Paul

Information and Registration

Continuing Medical Education, St. Paul-Ramsey Medical Center,
640 Jackson Street, St. Paul, MN 55101; Phone 612/221-3992



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RAMSEY

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Classified rates are 50¢ a word. Minimum monthly charge is \$10; with box number \$2 additional. Ads will not be accepted by phone.

- Placement of ads must be made six weeks before the date of publication (e.g., March 15 for May ad). Please send ad requests to *Minnesota Medicine*, 2221 University Avenue SE, Suite 400, Minneapolis, Minnesota 55414.
- The publisher reserves the right to decline or withdraw advertisements. The publisher is not responsible for clerical or typographical errors and is not permitted to divulge the identity of advertisers who have replies sent to box numbers.
- Cancellation of ads must be made by the first of the month preceding month of issue.

Johnson & Falls Search Associates represents new practice opportunities locally and nationally. Working exclusively in the area of physician search, we are committed to expanding your professional options while meeting our clients' needs. There are no fees to candidates. For a thorough, confidential search, send CV or call: Liz Johnson or Pat Falls, Johnson & Falls Search Associates, 34 Forest Dale Road, Minneapolis, MN 55410; 612/922-0237. (R)

Bemidji, Minnesota: Excellent opportunities for well-trained physicians. We are seeking BC/BE physicians in family practice and otolaryngology to join a young 33-physician multispecialty group practice located in northern Minnesota. Competitive salary guarantee plus incentive first year and excellent benefits. An excellent opportunity for a physician to enjoy practice in the center of hunting, fishing, and clear air. Please respond with CV to: C.C. Lowery, Administrator, Bemidji Clinic-MeritCare, 1233 34th Street NW, Bemidji, MN 56601; 218/751-1280. (R)

Internist to join a progressive 13-physician group practice. Rural college town 30 miles from St. Paul, Minnesota. New clinic and constructing new hospital. Contact: Robert B. Johnson, M.D., River Falls, WI 54022; 715/425-6701. (*9/91-R)

Urgent Care/Primary Care physicians for over 90 group positions in metropolitan Phoenix/Tucson, Arizona. Excellent compensation/partnership opportunities. Other quality positions nationwide. Send CV or call: Mitch Young (MM), PO Box 1804, Scottsdale, AZ 85252; 602/990-8080. (*1/90-R)

Family Practitioner to join a progressive 13-physician group practice. Rural college town 30 miles from St. Paul, Minnesota. New clinic and constructing new hospital. Contact: Robert B. Johnson, M.D., River Falls, WI 54022; 715/425-6701. (*9/91-R)

Mankato: FP partner to join four board-certified family physicians, ages 34-43, in fast-growing, full-range practice. Ob optional. Population 40,000+. Seventy miles to Twin Cities. Four colleges nearby. Subspecialty consultation readily available on hospital staff. Academic appointment available. Call: Tony Giefer, M.D., 507/387-8231. (8/91-R)

Family Physicians: Well-established south suburban Minneapolis family practice group seeks associates part/full time to staff day clinic. Excellent call schedule, salary, and fringe benefits. Also seeking locum tenens to staff PT/FT Urgent Care Centers and/or day clinic. Contact: Administration, Family Physicians, P.A., 612/435-4125, or send inquiries to Suite 100, 14050 Nicollet Avenue South, Burnsville, MN 55337. (*9/89-R)

Mankato Clinic, Ltd. is seeking BC/BE physicians in the following specialties: invasive cardiology, oncology/hematology, pulmonary medicine, general surgery, gastroenterology, family practice, and general internal medicine. The Mankato Clinic is a 53-physician multispecialty group practice in south-central Minnesota with a trade-area population of +250,000. Guaranteed salary first year, incentive thereafter with full range of benefits and liberal time off. For more information call: Dr. B. C. McGregor, President, or Roger Greenwald, Executive Vice President, 507/625-1811 or write: 501 Holly Lane, Mankato, MN 56001. (12/91-R)

BC/BE Family Practice, Internal Medicine, and Ob/Gyn Physician: Excellent opportunity to join well-established, progressive, 20-physician multispecialty group located in an economically sound community of 20,000 (drawing area of 40,000), 65 miles south of the Twin Cities. Full membership after one year. Competitive salary and fringe benefits package. Contact: Ed Durst, M.D., or Terry Tone, Administrator, 134 Southview, Owatonna, MN 55060; 507/451-1120. (2/92-R)

Forest Lake Doctor's Clinic is seeking a BC/BE family physician, pediatrician, ob/gyn, and internist to join 10-physician multispecialty group. Located 25 miles north of Minneapolis-St. Paul in progressive community with excellent schools, many beautiful lakes, recreational activities, golf, fishing, boating, skiing. Local hospital directly across street. Contact: Dr. Harvey J. Frank or Dr. Doug Sill, 121 SE 11th Avenue, Forest Lake, MN 55025; 612/464-7100. (4/90-R)

MDsearch assists medical groups and hospitals in their recruiting efforts. For confidential information on opportunities in the Upper Midwest, send CV and/or call collect: Mary Jo Cordes, MDsearch, PO Box 21507, St. Paul, MN 55121; 612/454-7291. (12/91-R)

Lake City, Minnesota: Family physician BC/BE needed to join three other FPs in progressive, growing practice on Lake Pepin/Mississippi River in southeastern Minnesota. Excellent first-year salary/benefits in a scenic community with multiple recreational opportunities. Contact: D.D. Pflaum, M.D., 303 South Washington, Lake City, MN; 612/345-3318. (8/90-R)

Olmsted Medical Group is seeking BC/BE physicians in the following specialties: orthopedics, radiology, family practice, emergency medicine, and ob/gyn. Great opportunity for well-trained physicians to join a 55+ physician multispecialty group in a dynamic, progressive practice. In addition to the main office in Rochester, the group operates eight branch offices in southeastern Minnesota. Excellent salary/benefits package includes malpractice insurance, flexible benefits plan, 401(k) and profit sharing, and relocation assistance. Send CV to: Olmsted Medical Group, Attn: Susan Schuett, 210 Ninth Street SE, Rochester, MN 55904. (1/92-R)

Downtown Office Space for Rent: Physician in the Medical Arts Building, 825, wishes to sublet to another physician on a part-time basis for the purpose of sharing overhead expenses. Call: 612/370-0553. (6/90-R)

Wisconsin: 120-physician multispecialty clinic in the Fox River Valley of northeastern Wisconsin desires two BC/BE pediatricians to join department of 15 BC/BE pediatricians. Excellent compensation and benefits package, leading to shareholder status after two years. The community offers a superb recreational, cultural, and family environment in which to practice. For information please call or write: Howard Kidd, M.D., La Salle Clinic, 411 Lincoln Street, Neenah, WI 54956; 414/727-4276. (3/91-R)

Family Physician wanted to join three board-certified M.D.s in well-established, expanding group practice. Weekend ER coverage. No buy-in. Financial package hard to beat. Enjoy a progressive, rural city within easy reach of St. Cloud and Minneapolis. Contact: Dr. Jim Mohs, Melrose Clinic, 603 West Main Street, Melrose, MN 56352; office, 612/256-4228; home, 612/256-3488. (4/91-R)

Internal Medicine, Pediatrics, and Dermatology practice opportunities available at the Faribault Clinic. The Faribault Clinic is a multispecialty group practice of 19 physicians. Faribault is located 50 miles south of Minneapolis on I-35. For more information contact: Ray W. Wood, M.D., or Ken Smith, Administrator, 924 NE First Street, Faribault, MN 55021; 507/334-3921. (4/90-R)

Stillwater: Multispecialty group with emphasis on primary care seeking BC/BE family physician, pediatrician, and internist. Scenic location with excellent school system, supportive medical community with strong local hospital, competitive salary and benefits. Send CV to: Jon Petersen, St. Croix Valley Clinic, 921 Greeley, Stillwater, MN 55082; 612/439-2215. (12/92-R)

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The University of Minnesota Department of Ophthalmology and Ramsey Clinic are seeking a full or part-time assistant professor to join the current staff of 35 ophthalmologists. This is an annually renewed, non-tenured position located in the Department of Ophthalmology at St. Paul-Ramsey Medical Center.

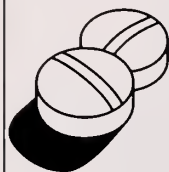
Minimum requirements are completion of an ophthalmology residency, board eligibility and teaching experience. Teaching will include residents, fellows, medical and technician students. The opportunity to conduct research exists and is supported, but is not a requirement. Patient care responsibilities will be in the area of general ophthalmology.

Ramsey Clinic is a multi-specialty group practice based in St. Paul, Minnesota. More than 250 physicians are members of the clinic, with specialists in virtually every medical field. The clinic has a unique partnership with St. Paul-Ramsey Medical Center, a 435-bed primary and tertiary hospital. Our mission: to provide high quality medical care to all patients, regardless of their ability to pay. This mission, combined with an emphasis on teaching, support for research and an exceptional partnership between the clinic and medical center, makes this an ideal group practice for physicians interested in making a difference. You can practice medicine just about anywhere. So how do you choose the practice setting that's right for you? If you want the satisfaction that comes from direct patient care, the energizing effect of training new physicians, the challenges and discoveries inherent in research, and the satisfaction of working with colleagues considered experts in their field, then the choice is clear — Ramsey.

A letter of interest and curriculum vitae should be forwarded by March 30, 1992 to: Mark Sneed, M.D., c/o Loriesse A. Stoll, Director of Professional Services, Ramsey Clinic, 640 Jackson Street, St. Paul, MN 55101-2595, (612) 221-3067.

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Lake Region Clinic in Brainerd, Minnesota is currently recruiting 2 Family Practice physicians to join 4 family practice physicians. Able to do the full scope of family practice including ICU (OB optional). Good cooperative working relationship with specialists in orthopedic surgery, urology, ENT, OBG, general surgery, internal medicine, ophthalmology, and psychiatry.

Modern well-equipped 160 bed hospital within two blocks.

We offer first year guarantee plus incentive, vacation time, CME study time, insurance, and more.

Send CV or contact:
Darral Mischke, Administrator,
or David Boran, M.D., at
218-829-3568

Family Physician wanted to join five-physician, two-P.A., two-site family practice group in St. Anthony and Shoreview. Ob available. Competitive salary, benefits package, and call schedule. Contact: Gerald Pitzl, M.D., Silver Lake Clinic PA, 612/788-9251. (7/91-R)

General Surgeon: Five-man family practice group seeks surgeon. Only clinic in city of 8,000, one hour from Minneapolis. Position should generate adequate salary and lots of family time. Write: Minnesota Medicine (853), 2221 University Avenue SE, Suite 400, Minneapolis, MN 55414. (8/91-R)

Wadena, Minnesota: Beautiful central Minnesota is home to the Wadena Medical Center, a five-physician group, and Tri-County Hospital. A scenic three-hour drive from Minneapolis. Family physicians to do obstetrics. Contact Dr. Matt Yelle, 218/631-1360, or Jim Lawson, Administrator, 218/631-3510. You'll not want to pass up this attractive place and offer. (8/91-R)

Pediatrician wanted to join group of five board-certified pediatricians in a well-established, progressive group practice. Located in Minneapolis, minutes away from Children's Medical Center. Small practice stressing patient care and preventive medicine. Contact: Gregg Savitt, M.D., 3145 Hennepin Avenue, Minneapolis, MN 55408. (9/91-R)

Office Space Available 5/1/91 for sublease. 1,220 square feet, Southdale Medical Building. Two exam rooms, conference room, waiting/reception area. Inquiries: 612/333-6484. 6-3/92

Family Physician/Internist: Regional treatment center interested in two full-time, BC/BE family practitioners/internists. Forty hours/week. Competitive salary and benefits. Live in the exciting Brainerd lakes area. Send CV to: Chief of Medicine, Brainerd Regional Human Services Center, 1777 Highway 18 East, Brainerd, MN 56401. 6-4/92

Burdick Treadmill and EKG for lease/rent and used medical equipment and supplies for sale. Excellent condition. Call 218/828-1358. 6-4/92

Internist to join two internists in active practice in scenic upper Michigan. Medical school affiliation. Contact: North Shore Internal Medicine, 2420 First Avenue South, Escanaba, MI 49829; 906/786-1563. (*11/91-R)

Improve Your Writing: Need help with your writing for professional publications or popular magazines? Former magazine editor and University of Minnesota School of Journalism professor of magazine writing will analyze your writing and tutor you. 612/426-7495. *4-3/92

Mora, Minnesota—Family Physician needed to join a seven-member FP group. We are a well-established, expanding practice and offer competitive salary and benefits package with partnership available. We have JCAHCO-accredited

hospital, on-site consultations from numerous specialty disciplines, satellite offices located in Pine City and Hinckley. Mora is a progressive community located 65 miles north of the Twin Cities with an excellent school system and many cultural and recreational opportunities within easy access. Contact: Larry J. Brettingen, M.D., 224 Seventh Street, Mora, MN 55051; 612/679-1340. 6-5/92

Family Practice: Northeastern Iowa. Become part of the growing Family Care Network. Established practice, optional, ample coverage. Small-town atmosphere, 40-bed hospital, 260-bed regional referral center within one-hour drive. Excellent income guarantee plus benefits. Wanda Parker, E. G. Todd Physician Search, Inc., 915 Broadway, Suite 1101, New York, NY 10010; 800/221-4762; fax: 212/777-5701. *5-4/92

Family Practice Wisconsin: Physician needed for partnership in broad-based primary care practice in exceptional south-central community. Shared call, fully equipped and staffed office, very competitive guaranteed salary, and comprehensive benefits package. For information on this and other opportunities in the Upper Midwest, contact and send CV to: Mary Jo Cordes, President, MDsearch, PO Box 21507, St. Paul, MN 55121; or call: 612/454-7291. Fax: 612/454-7277. *4-3/92

Oshkosh, Wisconsin: Single-specialty groups are recruiting in pediatrics, ob/gyn, cardiology, pathology, and orthopedic surgery. Oshkosh is an attractive community of 55,000 people, located on the shores of Lake Winnebago and in the heart of Wisconsin's beautiful Fox River Valley. Competitive financial packages. Contact: Christopher Kashnig, Physician Recruiter, Mercy Medical Center, 631 Hazel Street, Oshkosh, WI 54902; or call: 800/242-5650, Ext. 2430, or 414/236-2430. *3-3/92

Family Practice—Minnesota: Enjoy the benefits of country living yet have the resources of a major metropolitan area close at hand. Health One Buffalo Hospital is seeking a family physician to join two FPs and a nurse practitioner in its clinics in Annandale and Winsted. Share call with five physicians. Competitive compensation with excellent benefits including year-round outdoor recreation in "the heart of the lakes." Contact: Kim Isenberg, Health One Buffalo Hospital, 303 Catlin Street, PO Box 609, Buffalo, MN 55313; 612/682-1212, Ext. 245. 6-6/92

Wisconsin—Internist Wanted: Group Health Cooperative, a progressive, growing, staff-model HMO in a city of 60,000 in west-central Wisconsin, is currently recruiting a third internist. Very competitive salary with excellent fringe benefits. Practice high-quality internal medicine in a most desirable location. Please contact: Stuart R. Lancer, M.D., M.B.A., Medical Director, Group Health Cooperative, PO Box 3217, Eau Claire, WI 54702-3217; 715/836-8552. *3-3/92

Wisconsin—Fourth BC/BE Obstetrician/Gynecologist needed to join stable, progressive, primary-care-based HMO/

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group practice in university town of 60,000 near Minneapolis/St. Paul. Excellent quality of life and outstanding recreational area. Competitive salary and fringe benefits. Contact: Stuart R. Lancer, M.D., M.B.A., Medical Director, Group Health Cooperative, PO Box 3217, Eau Claire, WI 54702-3217; 715/836-8552. *4-6/92

Wisconsin—Family Practitioner Needed by progressive and growing group practice in west-central Wisconsin city of 60,000. Ninety miles from Minneapolis/St. Paul. Primarily prepaid practice with large component FFS. Highly competitive salary with excellent fringe benefits. Practice high-quality care in a good recreational area. Send CV to: Stuart R. Lancer, M.D., M.B.A., PO Box 3217, Eau Claire, WI 54702-3217; 715/836-8552. *4-6/92

One or Two Family Practice Physicians to join five family practitioners. Population 8,000. One hour south of Burnsville Center. Lakes, industry, negotiable salary. Clinic adjacent to hospital. Ample free time to enjoy family life. Contact James W. Dey, M.D., or Ruth Hawker, Clinic Manager, 501 North State Street, Waseca, MN 56093; 507/835-3110. (2/92-R)

The Monticello Clinic: Well-established multispecialty clinic adjacent to 39-bed acute-care/91-bed long-term care facility in a rural setting seeking a BC/BE family practitioner. Ideal location to raise a family. Thirty miles from large metropolitan area. Year-round cultural and recreational

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activities. Excellent salary guarantee, production incentive, and benefits package. For more information, contact: Penny M. Vail, Director, Clinic Services, North Memorial Medical Center, 3300 Oakdale North—3E Perinatal, Minneapolis, MN 55422; 612/520-4839. 3-4/92

Northbrook Clinic: Special opportunity for BC/BE family practitioner to join a well-established, three-physician clinic. This practice will be moving in 1992 to a new facility. This northern suburb offers a safe family environment and outstanding educational, cultural, and recreational amenities. Excellent salary guarantee, production incentive, and benefits package. For more information, contact: Penny M. Vail, Director, Clinic Services, North Memorial Medical Center, 3300 Oakdale North—3E Perinatal, Minneapolis, MN 55422; 612/520-4839. 3-4/92

Wayzata Family Physicians: Special opportunity for BC/BE family practitioner to join a well-established, five-physician practice located in a prime suburb community near beautiful Lake Minnetonka. The area is surrounded by top-quality schools, shopping centers, and an abundance of recreational, family, and social activities. Excellent salary guarantee, production incentive, and benefits package. For more information, contact: Penny M. Vail, Director, Clinic Services, North Memorial Medical Center, 3300 Oakdale North—3E Perinatal, Minneapolis, MN 55422; 612/520-4839. 3-4/92

Southeast Wisconsin Pediatrics: Join busy pediatric group in prospering community close to Milwaukee, Madison, and Chicago. Rewarding lifestyle, capable colleagues, shared call, first-class hospital with special-care nursery. Please contact: Kathryn Iorio, M.D., Waukesha Pediatric Associates, Ltd., 1111 Delafield Street, #115, Waukesha, WI 53188; 414/542-6999. 3-4/92

Ideal Internal Medicine Practice: Excellent opportunity for BC/BE internist to establish a prosperous practice. Progressive 107-bed community hospital with a medical staff of 45 physicians and a service-area population of over 45,000. Vibrant Northern Michigan community with all summer and winter recreational activities. Very competitive first-year guarantee with benefits. Send CV or contact: John Schon, Administrator, Dickinson County Hospitals, 400 Woodward Avenue, Iron Mountain, MI 49801; 800/323-8856. *1-3/92

Family Practice: Physicians seeking a BC/BE family practice physician for the Norway, Michigan, service area. The physician would have the option of joining one of the existing practices and/or setting up his/her own practice. Anderson Memorial Hospital is a part of Dickinson County Hospitals and has a service-area population of over 45,000. Contact: Dr. Paul Hayes' office, 906/563-9255, or Dr. William Gladstone's home, 906/563-8743. Anderson Memorial Hospital, Main Street, Norway, MI 49870; 906/563-9243. *1-3/92

Position Available for Family Physician in Suburban St. Paul: Exceptional opportunity exists to join our clinic of three family physicians, three internists, and one pediatrician. The practice combines the satisfaction and independence of a small practice with the many benefits of an affiliation with a larger multispecialty group. Comfortable and pleasant working conditions and an excellent benefits package. Part- or full-time positions are available. Please contact Karen Steiner, M.D., Ramsey Clinic Maplewood, 1774 Cope Avenue, Maplewood, MN 55109; 612/770-1497. Equal Opportunity Employer. *2-3/92

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Internal Medicine: Excellent opportunity available for BC/BE internist in picturesque southwestern Wisconsin. Solo practice or partnership. Benefits include competitive income guarantee, malpractice insurance, paid vacation, and more. Confidential inquiries welcome: 800/969-7715, Dan Jones, Gielow/Laske Associates, 306 North Milwaukee Street, Milwaukee, WI 53202. *1-3/92

Family Practice, Ob/Gyn, Internal Medicine, and Urgent Care positions are available in a variety of settings from Central Michigan, through Illinois, Wisconsin, and Nebraska, to the rolling plains of Kansas. Single or multispecialty groups, faculty, or solo with generous call coverage. Attractive guarantees and benefits. For more information, please contact our toll-free number, 800/243-4353, or send your CV to Strelcheck & Associates, Inc., 10624 North Port Washington Road, Mequon, WI 53092. *2-4/92

BC/BE Internist with or without subspecialty training to join six other internists in 16-member multispecialty clinic in Worthington, Minnesota. Liberal vacation and meeting time including stipend. Contact R. D. Sudmeier, M.D., or John J. Sieve, Administrator, Worthington Medical Center, P.A., Worthington, Minnesota 56187; 507/372-2921. 3-5/92

Sixth Annual Door County Summer Institute: Egg Harbor, Wisconsin. Sessions run from 9 a.m. to 12:15 p.m. daily. CME and CEU credits available. **July 27-31, 1992:** Session I—Harry Levinson, Ph.D., Organizational Diagnosis. Session II—Russell Barkley, Ph.D., Attention Deficit Disorders. **August 3-7, 1992:** Session III—Albert Ellis, Ph.D., Rational Emotive Therapy. Session IV—Diana Kirschner, Ph.D., and Sam Kirschner, Ph.D., Treating Survivors of Incest and Abuse. Session V—James Jefferson, M.D., Psychopharmacology Update. **August 10-14, 1992:** Session VI—Jerrold Post, M.D., Political Psychiatry. Session VII—Stephen Rao, Ph.D., Thomas Hammeke, Ph.D., and Mariellen Fischer, Ph.D., Neuropsychological Testing. Sponsored by the Psychotherapy Center at Columbia Hospital and the Department of Psychiatry at the Medical College of Wisconsin. For more information, contact Carlyle H. Chan, M.D., Summer Institute Director, Psychiatry Department, Medical College of Wisconsin, 8701 Watertown Plank Road, Milwaukee, WI 53226; 414/257-5995. *1-3/92

Diagnostic Radiologist: Excellent opportunity to join a three-man group in a flourishing general radiology practice that includes all modalities (angio and interv. limited at this point but could be expanded). Generous salary leading to early partnership in professional corporation. Great community where recreational and cultural activities abound. Relatively free from metro competitive hassles. Send CV to: James P. Zachman, M.D., Radiology Department, Rice Memorial Hospital, Willmar, MN 56201; 612/231-4530. 3-5/92

General Internist—St. Cloud, Minnesota: Opportunity available in a growing physician clinic of specialists and subspecialists of internal medicine. Community has three colleges, excellent school system, and abundant recreational activities. Family living conditions are excellent! The St. Cloud Clinic is located in a new facility with access to the latest medical technological developments. For more information about this position, please contact: Scott Davis, M.D., or Mark Murphy, Administrator, 1200 Sixth Avenue North, St. Cloud, MN 56303; 612/252-5131. 2-4/92

Rheumatologist—St. Cloud, Minnesota: Opportunity available in a growing physician clinic of specialists and subspecialists of internal medicine. Community has three colleges, excellent school system, and abundant recreational activities. Family living conditions are excellent! The St. Cloud Clinic is located in a new facility with access to the latest medical technological developments. For more information about this position, please contact: Scott Davis, M.D., or Mark Murphy, Administrator, 1200 Sixth Avenue North, St. Cloud, MN 56303; 612/252-5131. 2-4/92

Internal Medicine: Opportunities available for BC/BE internists to join a well-established, 85-physician, multispecialty group practice in the metro Twin Cities area. Excellent compensation and benefit package. Contact: Nancy Borgstrom, Aspen Medical Group, 1020 Bandana Boulevard West, St. Paul, MN 55108; 612/641-7170. EOE. *1-3/92

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New Beginnings at Waverly—Medical Director: Immediate opportunity for a physician licensed in the state of Minnesota to serve as medical director for 40-bed, JCAHO adult chemical dependency treatment center. Duties include H&Ps, patient education, UR/case management, involvement and participation in a multidisciplinary treatment approach to therapy. Position involves approximately 20 hours per week and call. Malpractice insurance provided, excellent benefits including 401k and pension. New Beginnings is located 35 miles west of Minneapolis on lakeshore property. Contact: Jane Hausladen, Human Resources, or Gil Gilchrist, Administrator, at 800/487-8758. *2-4/92

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Continuing Medical Education: Third Annual Specialty Update hosted by the Division of General Internal Medicine, Medical College of Wisconsin, June 24-26, 1992. Location: The American Club resort and Blackwolf Run golf course, Kohler, Wisconsin. Course fee of \$360 includes two days of golf. Approved for seven category 1 CME credits. For registration and information contact: Amy Barnickel, 414/257-6040. *2-4/92

BC/BE Ob/Gyn needed to join active solo ob/gyn practice in suburban Minneapolis. Purchase of practice with favorable terms available if desired. Call 612/377-7373 evenings. 3-5/92

Door County, Wisconsin. Emergency Medicine. BC/BE family practice, internal medicine, pediatrics, or emergency medicine. General emergency medicine experience required. ACLS/ATLS required, PALS preferred. Full-time position with eight to ten 24-hour shifts monthly with flexibility. Competitive salary and benefits package. Modern 89-bed hospital with a new emergency department and outpatient services addition. Approximately 10,000 visits per year. Exceptional four seasons' recreation along Lake Michigan shores. Proximity to Milwaukee/Chicago. Top-rated schools. Quality community life. Send CV to: Priscilla Khoury, Physician Recruitment Coordinator, 330 South 16th Place, Sturgeon Bay, WI 54235. *3-5/92

Pain Fellowship: Position for PGY4 or PGY5 to participate in a one- or two-year program of clinical pain management and clinical or basic research beginning July 1, 1992, sponsored by the Department of Neurology, Hennepin County Medical Center in Minneapolis. The program maintains an active outpatient practice and sees hospitalized patients on a referral basis from all departments. Opportunities to learn pharmacological management, acupuncture, peripheral nerve blockade, biofeedback techniques, and

other areas related to pain are available. Hennepin County Medical Center is an equal opportunity educator and employer and specifically invites and encourages applications from women and minorities. Application and CV should be sent to: Miles J. Belgrade, M.D., Director, Hennepin Pain Clinic, Department of Neurology, Hennepin County Medical Center, 701 Park Avenue South, Minneapolis, MN 55415. 3-5/92

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The recommended starting dose for Calan SR is 180 mg once daily. Dose titration will be required in some patients to achieve blood pressure control.

A lower initial starting dosage of 120 mg/day may be warranted in some patients (eg, the elderly, patients of small stature).

Constipation, which is easily managed in most patients, is the most commonly reported side effect of Calan SR.

BRIEF SUMMARY

Contraindications: Severe LV dysfunction (see *Warnings*), hypotension (systolic pressure < 90 mm Hg) or cardiogenic shock, sick sinus syndrome (if no pacemaker is present), 2nd- or 3rd-degree AV block (if no pacemaker is present), atrial flutter/fibrillation with an accessory bypass tract (eg, WPW or LGL syndromes), hypersensitivity to verapamil.

Warnings: Verapamil should be avoided in patients with severe LV dysfunction (eg, ejection fraction < 30%) or moderate to severe symptoms of cardiac failure and in patients with any degree of ventricular dysfunction if they are receiving a beta-blocker. Control milder heart failure with optimum digitalization and/or diuretics before Calan SR is used. Verapamil may occasionally produce hypotension. Elevations of liver enzymes have been reported. Several cases have been demonstrated to be produced by verapamil. Periodic monitoring of liver function in patients on verapamil is prudent. Some patients with paroxysmal and/or chronic atrial flutter/fibrillation and an accessory AV pathway (eg, WPW or LGL syndromes) have developed an increased antegrade conduction across the accessory pathway bypassing the AV node, producing a very rapid ventricular response or ventricular fibrillation after receiving I.V. verapamil (or digitalis). Because of this risk, oral verapamil is contraindicated in such patients. AV block may occur (2nd- and 3rd-degree, 0.8%). Development of marked 1st-degree block or progression to 2nd- or 3rd-degree block requires reduction in dosage or, rarely, discontinuation and institution of appropriate therapy. Sinus bradycardia, 2nd-degree AV block, sinus arrest, pulmonary edema and/or severe hypotension were seen in some critically ill patients with hypertrophic cardiomyopathy who were treated with verapamil.

Precautions: Verapamil should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) or impaired renal function, and patients should be monitored for abnormal prolongation of the PR interval or other signs of overdose. Verapamil may decrease neuromuscular transmission in patients with Duchenne's muscular dystrophy and may prolong recovery from the neuromuscular blocking agent vecuronium. It may be necessary to decrease verapamil dosage in patients with attenuated neuromuscular transmission. Combined therapy with beta-adrenergic blockers and verapamil may result in additive negative effects on heart rate, atrioventricular conduction and/or cardiac contractility; there have been reports of excessive bradycardia and AV block, including complete heart block. The risks of such combined therapy may outweigh the benefits. The combination should be used only with caution and close monitoring. Decreased metoprolol and propranolol clearance may occur when either drug is administered concomitantly with verapamil. A variable effect has been seen with combined use of atenolol. Chronic verapamil treatment can increase serum digoxin levels by 50% to 75% during the first week of therapy, which can result in digitalis toxicity. In patients with hepatic cirrhosis, verapamil may reduce total body clearance and extrarenal clearance of digoxin. The digoxin dose should be reduced when verapamil is given, and the patient carefully monitored. Verapamil will usually have an additive effect in patients receiving blood-pressure-lowering agents. Disopyramide should not be given within 48 hours before or 24 hours after verapamil administration. Concomitant use of flecainide and verapamil may have additive effects on myocardial contractility, AV conduction, and repolarization. Combined verapamil and quinidine therapy in patients with hypertrophic cardiomyopathy should be avoided, since significant hypotension may result. Concomitant use of lithium and verapamil may result in a lowering of serum lithium levels or increased sensitivity to lithium. Patients receiving both drugs must be monitored carefully. Verapamil may increase carbamazepine concentrations during combined use. Rifampin may reduce verapamil bioavailability. Phenobarbital may increase verapamil clearance. Verapamil may increase serum levels of cyclosporin. Verapamil may inhibit the clearance and increase the plasma levels of theophylline. Concomitant use of inhalation anesthetics and calcium antagonists needs careful titration to avoid excessive cardiovascular depression. Verapamil may potentiate the activity of neuromuscular blocking agents (curare-like and depolarizing); dosage reduction may be required. There was no evidence of a carcinogenic potential of verapamil administered to rats for 2 years. A study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. Pregnancy Category C. There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor, and delivery only if clearly needed. Verapamil is excreted in breast milk; therefore, nursing should be discontinued during verapamil use.

Adverse Reactions: Constipation (7.3%), dizziness (3.3%), nausea (2.7%), hypotension (2.5%), headache (2.2%), edema (1.9%), CHF, pulmonary edema (1.8%), fatigue (1.7%), dyspnea (1.4%), bradycardia: HR < 50/min (1.4%), AV block: total 1°, 2°, 3° (1.2%), 2° and 3° (0.8%), rash (1.2%), flushing (0.6%), elevated liver enzymes, reversible non-obstructive paralytic ileus. The following reactions, reported in 1.0% or less of patients, occurred under conditions where a causal relationship is uncertain: angina pectoris, atrioventricular dissociation, chest pain, claudication, myocardial infarction, palpitations, purpura (vasculitis), syncope, diarrhea, dry mouth, gastrointestinal distress, gingival hyperplasia, ecchymosis or bruising, cerebrovascular accident, confusion, equilibrium disorders, insomnia, muscle cramps, paresthesia, psychotic symptoms, shakiness, somnolence, arthralgia and rash, exanthema, hair loss, hyperkeratosis, macules, sweating, urticaria, Stevens-Johnson syndrome, erythema multiforme, blurred vision, gynecostasia, galactorrhea/hyperprolactinemia, increased urination, spotty mensturation, impotence.

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A JOURNAL OF CLINICAL AND HEALTH AFFAIRS



4 DR. MICHAEL BREEN

Medicine Makes News

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APRIL 1992

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Exceptional professional and recreational choices are yours in West Michigan. Due to rapid growth, the Butterworth Health System offers attractive professional positions in its 530 bed tertiary care teaching hospital, 4 affiliate hospitals, and 7 Med+Centers. Positions are available in pediatrics, medicine/pediatrics, internal medicine, surgery, orthopedic surgery, otolaryngology, radiology, and OB/GYN. Opportunities include group practice, partnership, and solo or salaried urgent care and outpatient practices.

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For information about the above positions, please call or write to
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Butterworth Health System, MC 73, Nancy Martens, 100 Michigan NE,
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Minnesota Medicine

A JOURNAL OF CLINICAL AND HEALTH AFFAIRS



COVER

Medicine Makes News. The public's appetite for medical news has brought success to physician reporters like WCCO-TV's Michael Breen, M.D., profiled in our cover story (page 20). In that story and this month's interview with Thomas Shives, M.D., host of the popular Rochester radio show "Healthline" (page 7), we look at how M.D. journalists reach patients through a variety of media.

Photo by Rob Levine of Minneapolis.

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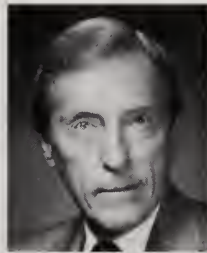
Edmund C. Burke, M.D.

The public seems to have an insatiable appetite for medical news as evidenced by the number of successful medical journalists in the state and country today—including an estimated 250 physicians nationwide who appear on radio and television, some on national programs. This month, I'd like you to meet some local media doctors. Our cover story (page 20) features the Twin Cities' "TV Doctor" Michael Breen, M.D., with a sidebar about Paul Quie, M.D., and his University of Minnesota-sponsored medical TV show "Health Talk and You." We also talk with Thomas Shives, M.D., host of the medical talk show "Healthline" on KROC-AM in Rochester, in this month's interview (page 7).

Unlike the other medical communicators featured in this month's issue, Dr. Michael Breen is not a practicing physician. He graduated from Albert Einstein College of Medicine and did a residency in internal medicine, but because of what he calls disillusionment, he left his medical training for journalism school.

Comments Dr. Breen makes in our cover story regarding his disillusionment concern me and might bother other physicians who have spent years caring for patients. I hope Dr. Breen's empathy tank was not on "E" when he made his decision to leave clinical practice; perhaps he just wasn't cut out to deal with patients and their day-to-day problems and wisely chose another path. Yet, despite his rather critical view of the medical profession, I hope Dr. Breen is able to secure the cooperation and warm reception of those of us in medicine, the ultimate goal being to serve the public better.

Audience surveys indicate that medical stories receive high ratings



"Medical communication is a superb way to serve our patients."

on news shows, just below news updates and weather, according to Jack Reilly, executive producer of "Good Morning America." As a result, physician reporters have become a hot commodity. Take Dr. Timothy Johnson, for example. After 13 years as an emergency physician in Massachusetts, he is now medical editor for "Good Morning America" and "ABC News." In addition, he prepares reports for "World News Tonight," "20/20," and "Nightline." Dr. Bob Arnot, medical correspondent for CBS's "This Morning," is another example. He is regarded as the most colorful and aggressive of the morning news doctors. This fall, Dr. Holly Atkinson, a former internist, joined NBC's "Today" show as medical correspondent, replacing Dr. Art Ulene, who moved to ABC's "Home" show.

Medical information makes its way into the news in a variety of ways—TV, radio, newsletters, magazine stories, and newspaper articles, for example. Each medium offers physicians unique opportuni-

ties to educate patients in innovative ways. While I encourage every medical society to designate and train a physician to handle media questions and assist with public relations, I also believe interested physicians should personally get involved in medical communication. There are many ways to do so:

1. Look for opportunities to tie media interviews in with a broad message on health care.
2. Write a letter to the editor.
3. Submit an op/ed article to your local newspaper.
4. Get to know local reporters who cover health care reform and initiate contact.
5. Pass along any new research or statistics to your media contacts with a personal note.
6. Inform your media contacts about local events.
7. Arrange a meeting with your newspaper's editorial board to discuss your society's or your own opinions on various health matters of legislative concern.

Some physicians, such as Dr. Shives, have the talent and energy to start their own medical programs. If you're interested in radio, take note of Dr. Shives' message that preparation is the most important element in any successful radio program.

Minnesota has many physicians who are on TV, who write columns or editorials, or who have radio talk shows. I extend an invitation to those of you involved in medical communication to write me about your activity. Please share any advice you might have for other physicians wanting to enter this exciting arena. I commend those of you who have gotten involved; medical communication is a superb way to serve our patients.

MM



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our race against rising medical costs would have been lost long ago.



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Physician Broadcaster Gets Good Reception

Minnesota Medicine interviews Thomas C. Shives, M.D.

Thomas Shives, M.D., an orthopedic surgeon at Mayo Clinic, has found a new vocation—radio. Each Saturday from 9:15 to 10 a.m., he hosts a medical talk show called "Healthline" on KROC-AM in Rochester, a show he created with the Zumbro Valley Medical Society. When the show started last June, it hit the ground running and has taken off faster than any of the station's top programs, according to KROC Program Director Joe O'Brien.

Each week Dr. Shives interviews guests about a hot medical topic and then opens the phone lines for listener questions. The phone banks are full nearly every week. "Feedback from listeners has been quite outstanding," says O'Brien. "There are weeks when we could take the show an additional hour and still not get through all the phone calls. People are that interested."

O'Brien credits the program's success to Dr. Shives. "Not only is he a knowledgeable physician, but he also has a great on-air presence," says O'Brien. "His preparation is phenomenal, and he is very particular about the guests he brings on the show. Not only are they expert physicians, but they are able to communicate with the layman. And the topics he chooses interest the listener—they're real consumer topics."

Dr. Shives chooses topics in conjunction with members of the Public Liaison Committee of the Zumbro Valley Medical Society. Together, they come up with issues that generate public interest, such as cancer, cardiovascular health, nutrition, and AIDS. The committee then approaches expert physicians—usually members of the Zumbro Valley Medical Society—to participate as guests.

Dr. Shives and O'Brien have been overwhelmed by the program's success. "We're thrilled to have the show," says O'Brien. "We're thrilled to have some of the top medical experts not only in our state, but in the country and world, come into our humble radio station every week to be on the show." In the following Face to Face interview, Dr. Shives discusses the program and its success.

Minnesota Medicine: To begin with, Dr. Shives, please tell us about your background—where you grew up, went to school, completed your residency, and started practicing orthopedic surgery.



Thomas C. Shives, M.D.

Shives: I grew up in the small town of Newton, Iowa, and attended Cornell College in Mount Vernon, Iowa. I completed my medical school training in 1974 at the University of Iowa. I then came to Rochester for my orthopedic surgery residency and an orthopedic oncology fellowship. I joined the Mayo Clinic staff in 1979.

Minnesota Medicine: I understand that you have some background in broadcasting. How did your interest in broadcasting get started and how has it progressed?

Shives: Actually, my experience in high school speech and debate has helped me most in broadcasting. I never did radio work until a few years ago, after I had an operation to repair a cervical disc. Because I was unable to perform surgery for three months, I needed something to occupy my time, so I went to KROC radio and told them that I wanted to give the news. They were a bit dumfounded at

my request, but it didn't hurt that I was willing to do it for free. I auditioned, and Program Director Joe O'Brien and News Director Kim David tutored me—I practiced. For two months of my recovery I gave the afternoon news under an assumed name. That's how I really got my initial experience in the technical aspects of radio—how to run "the board" and what it's all about. I really haven't had any other broadcasting experience.

Getting 'Healthline' Started

Minnesota Medicine: How did "Healthline," the new radio program you host on KROC-AM in Rochester, get started?

Shives: About a year ago, Dr. Ed Henderson asked me to chair the Public Liaison Committee of the Zumbro Valley Medical Society, and I agreed. He told me that the society had been thinking about starting a radio program

"The public has an almost insatiable desire for medical news and information."

to help inform the public about medical issues. Since I knew the people at KROC radio, I approached them about it. I told them my idea for a show, and they were enthusiastic about having us. They decided Saturday morning would be an excellent time for the show.

On June 1, 1991, we aired our first show, and since then we have been gradually building our audience. We don't do a great deal of marketing, but I think our audience grows by word of mouth. We mail flyers to hospitals, pharmacies, and nursing homes, and we place an ad once a week in the local newspaper announcing the week's topic and listing the program's guests.

The Format, Audience, Topics, and Guests

Minnesota Medicine: Please describe the show's format.

Shives: When I designed the format, I tried to figure out what the public wanted and what we could do, as a medical profession, to help. I believe the public has an almost insatiable desire for medical news and information, but it's also sophisticated enough to want it from experts. The first thing we incorporated into the show was a review of the week's medical news. I glean medical stories from the newspaper, the Prodigy news service, and various journals, and then I try to edit them into lay language. I present the stories in a five-minute medical newscast to start the show. Then, to satisfy the public's desire for expert medical information, we have a different guest each week—physicians who are experts in their fields. I interview them for 10 or 15 minutes, which allows them to gain credibility with the audience. We then open the program to call-in questions from our audience. The format seems to work quite well. We get phone calls for virtually every show, and sometimes we get many more than we can handle. However, because we have a relatively small audience, some topics don't generate as many phone calls as others. I think people are listening to those shows, but some topics are sensitive, like psychiatric issues and impotence. People are more hesitant to call about these problems because someone might recognize their voice.

Minnesota Medicine: Joe O'Brien, program director, mentioned that the shows with fewer calls generate more requests for taped copies. It sounds as though people are listening, whether they call or not.

Shives: Actually, we probably get more information out when people don't call because I can ask questions without being interrupted. However, it's a better show when we have phone calls. I think our listeners want to hear what other people want to know.

Minnesota Medicine: Do you have problems with crank calls?

Shives: No, we don't. The thing that worried me most when I proposed the format is that we would get inappropriate questions, such as inquiries about sports medicine when we're talking about gallbladder attacks. But that hasn't happened; the audience is quite sophisticated. As far as true crank calls, we have had none.

Minnesota Medicine: How do you select your topics?

Shives: I do that in conjunction with the Public Liaison Committee. At each of our meetings, we try to come up with topics that would be of interest to the public. I also use newsworthy topics that seem to be most popular in the *Mayo Clinic Health Letter*. Most people think the biggest issues with regard to their health are cancer, cardiovascular health, nutrition, and AIDS. We start from there, select the most popular topics, and then think about all the different specialties and subspecialties we

have at the clinic and how we could incorporate those into the program. Virtually all medically oriented topics have interest. Physicians have participated in all but one show, a program on living wills. We had two attorneys on that program. It was one of the early shows, and we didn't get many phone calls. Otherwise, all the programs have been medical.

Minnesota Medicine: Where do you find your experts, and are they typically willing to go on the radio?

Shives: All our guests, with the exception of the two attorneys, have been members of the Zumbro Valley

Medical Society, and most of them practice either at the Olmsted Medical Group or at Mayo Clinic. The physicians we contact are almost always willing to be on the show. The only people who have refused to participate, and we've only had one or two, have been frightened of being on the radio; otherwise, everyone has been most cooperative. In fact, with the program's increased popularity, we have begun to receive requests from individuals, sections, and subspecialties to be on the program, so it's become easier to attract guests. Never has anyone refused because they were unwilling to take the time to help with the show.

One of the complaints we get as physicians is that we sometimes don't spend enough time with our patients; I think this show demonstrates that physicians are willing to spend the time to educate the public, even on a weekend.

Can Anybody Start a Radio Program?

Minnesota Medicine: What advice do you have for county, state, or specialty societies, or even local physicians, who are interested in starting similar radio programs?

Shives: Preparation is the key. I probably spend 10 to 12 hours a week getting ready for each show. Anyone

interested in doing a program like this has to be willing to spend the time. I believe a poor performance would be worse than no performance at all.

I suppose the best start is to approach a local radio station. Most are receptive to having some kind of local medical programming. However, I think it's becoming more difficult because there are so many sources of medical information available now, most of which are relatively good. Still, I think a local radio station is always receptive to local talent. Ask whether the station would be willing to help you learn the mechanics of being on the radio. Again, it takes time to learn about radio and to become comfortable with the format.

Minnesota Medicine: Are there any training programs for physicians interested in broadcasting?

Shives: The American Medical Association has an annual Health Reporting Conference, which was held April 2-5 this year. The conference offers seminars on broadcast writing, production, speech, and

editing. I recommend that physicians interested in broadcasting attend the program next year. (Call Jill Stewart at 312/464-5414 for more information.)

Communication as Patient Care

Minnesota Medicine: What is the value of "Healthline" to the public? Does the program actually improve your listeners' health?

"The public is, understandably, confused about a number of health issues."

Dr. Shives: The public is, understandably, confused about a number of health issues. For example, people are perplexed about good and bad cholesterol, the difference between low fat and "lite," the risks of silicone-gel breast implants, and how much exercise is enough. Determining what is and isn't good for you is no easy task in the '90s.

Frequently, before our callers hang up, they'll say: "You've helped me a lot," or "I really appreciate your time." To me, that says it all. I think that if our listeners heed the advice they get on "Healthline," they'll definitely benefit from it.

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3. In patients with normal renal function and uncomplicated hepatic dysfunction, the disposition of nizatidine is similar to that in normal subjects.

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Drug Interactions—No interactions have been observed with theophylline, chlordiazepoxide, lorazepam, lidocaine, phenytoin, and warfarin. Axid does not inhibit the cytochrome P-450 enzyme system; therefore, drug interactions mediated by inhibition of hepatic metabolism are not expected to occur. In patients given very high doses (3,900 mg) of aspirin daily, increased serum salicylate levels were seen when nizatidine, 150 mg b.i.d., was administered concurrently.

Carcinogenesis, Mutagenesis, Impairment of Fertility—A 2-year oral carcinogenicity study in rats with doses as high as 500 mg/kg/day (about 80 times the recommended daily therapeutic dose) showed no evidence of a carcinogenic effect. There was a dose-related increase in the density of enterochromaffin-like (ECL) cells in the gastric oxyntic mucosa. In a 2-year study in mice, there was no evidence of a carcinogenic effect in male mice, although hyperplastic nodules of the liver were increased in the high-dose males as compared with placebo. Female mice given the high dose of Axid (2,000 mg/kg/day, about 330 times the human dose) showed marginally statistically significant increases in hepatic carcinoma and hepatic nodular hyperplasia with no numerical increase seen in any of the other dose groups. The rate of hepatic carcinoma in the high-dose animals was within the historical control limits seen for the strain of mice used. The female mice were given a dose larger than the maximum tolerated dose, as indicated by excessive (30%) weight decrement as compared with concurrent controls and evidence of mild liver injury (transaminase elevations). The occurrence of a marginal finding at high dose only in animals given an excessive and somewhat hepatotoxic dose, with no evidence of a carcinogenic effect in rats, male mice, and female mice (given up to 360 mg/kg/day, about 60 times the human dose), and a negative mutagenicity battery are not considered evidence of a carcinogenic potential for Axid.

Axid was not mutagenic in a battery of tests performed to evaluate its potential genetic toxicity, including bacterial mutation tests, unscheduled DNA synthesis, sister chromatid exchange, mouse lymphoma assay, chromosome aberration tests, and a micronucleus test.

In a 2-generation, perinatal and postnatal fertility study in rats, doses of nizatidine up to 650 mg/kg/day produced no adverse effects on the reproductive performance of parental animals or their progeny.

Pregnancy—Teratogenic Effects—Pregnancy Category C—Oral reproduction studies in rats at doses up to 300 times the human dose and in Dutch Belted rabbits at doses up to 55 times the human dose revealed no evidence of impaired fertility or teratogenic effect, but, at a dose equivalent to 300 times the human dose, treated rabbits had abortions, decreased number of live fetuses, and depressed fetal weights. On intravenous administration to pregnant New Zealand White rabbits, nizatidine at 20 mg/kg produced cardiac enlargement, coarctation of the aortic arch, and cutaneous edema in 1 fetus, and at 50 mg/kg, it produced ventricular anomaly, distended abdomen, spina bifida, hydrocephaly, and enlarged heart in 1 fetus. There are, however, no adequate and well-controlled studies in pregnant women. It is also not known whether nizatidine can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Nizatidine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers—Studies in lactating women have shown that 0.1% of an oral dose is secreted in human milk in proportion to plasma concentrations. Because of growth depression in pups reared by treated lactating rats, a decision should be made whether to discontinue nursing or the drug, taking into account the importance of the drug to the mother.

Pediatric Use—Safety and effectiveness in children have not been established.

Use in Elderly Patients—Healing rates in elderly patients were similar to those in younger age groups as were the rates of adverse events and laboratory test abnormalities. Age alone may not be an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function.

Adverse Reactions: Worldwide, controlled clinical trials included over 6,000 patients given nizatidine in studies of varying durations. Placebo-controlled trials in the United States and Canada included over 2,600 patients given nizatidine and over 1,700 given placebo. Among the adverse events in these placebo-controlled trials, only anemia (0.2% vs 0%) and urticaria (0.5% vs 0.1%) were significantly more common in the nizatidine group. Of the adverse events that occurred at a frequency of 1% or more, there was no statistically significant difference between Axid and placebo in the incidence of any of these events (see package insert for complete information).

A variety of less common events were also reported; it was not possible to determine whether these were caused by nizatidine.

Hepatic—Hepatocellular injury (elevated liver enzyme tests or alkaline phosphatase) possibly or probably related to nizatidine occurred in some patients. In some cases, there was marked elevation (>500 IU/L) in SGOT or SGPT and, in a single instance, SGPT was >2,000 IU/L. The incidence of elevated liver enzymes overall and elevations of up to 3 times the upper limit of normal, however, did not significantly differ from that in placebo patients. All abnormalities were reversible after discontinuation of Axid. Since market introduction, hepatitis and jaundice have been reported. Rare cases of cholestatic or mixed hepatocellular and cholestatic injury with jaundice have been reported with reversal of the abnormalities after discontinuation of Axid.

Cardiovascular—In clinical pharmacology studies, short episodes of asymptomatic ventricular tachycardia occurred in 2 individuals administered Axid and in 3 untreated subjects.

CNS—Rare cases of reversible mental confusion have been reported.

Endocrine—Clinical pharmacology studies and controlled clinical trials showed no evidence of anti-androgenic activity due to nizatidine. Impotence and decreased libido were reported with similar frequency by patients on nizatidine and those on placebo. Gynecomastia has been reported rarely.

Hematologic—Anemia was reported significantly more frequently in nizatidine than in placebo-treated patients. Fatal thrombocytopenia was reported in a patient treated with nizatidine and another H₂-receptor antagonist. This patient had previously experienced thrombocytopenia while taking other drugs. Rare cases of thrombocytopenic purpura have been reported.

Integumental—Urticaria was reported significantly more frequently in nizatidine than in placebo-treated patients. Rash and exfoliative dermatitis were also reported.

Hypersensitivity—As with other H₂-receptor antagonists, rare cases of anaphylaxis following nizatidine administration have been reported. Rare episodes of hypersensitivity reactions (eg, bronchospasm, laryngeal edema, rash, and eosinophilia) have been reported.

Other—Hyperuricemia unassociated with gout or nephrolithiasis was reported. Eosinophilia, fever, and nausea related to nizatidine have been reported.

Overdosage: Overdoses of Axid have been reported rarely. If overdosage occurs, activated charcoal, emesis, or lavage should be considered along with clinical monitoring and supportive therapy. The ability of hemodialysis to remove nizatidine from the body has not been conclusively demonstrated; however, due to its large volume of distribution, nizatidine is not expected to be efficiently removed from the body by this method. PV 2093 AMP [101591]

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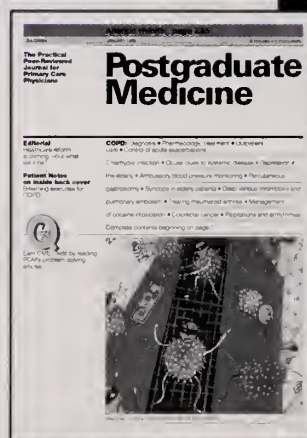
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Medicine in the Trenches

The Agony and the Ecstasy of the Rural Practitioner

Walter W. Benjamin, Ph.D.

Recent studies warn that primary health care delivery in rural areas is, to use a medical term, in extremis. Greater Minnesota is short 200 physicians, and the need is growing. As the son of a solo practitioner whose career spanned the middle of this century in a southwestern Minnesota town of 5,000, I wanted to uncover the personal and medical biographies of those who followed in his footsteps. Why is his profession—rural, intimate, and viewed almost as a religious vocation—being repudiated by later generations? I hoped to uncover positive stories that, if brought to light, might encourage more young physicians to give up the urban vanity fairs for rural practice.

During the summer of 1990, I sent a 57-question survey to 40 randomly selected family physicians in rural Minnesota and Wisconsin. Twenty-nine of the physicians, all board certified, returned the survey. Later, I traveled 2,500 miles to conduct open-ended interviews with 18 of the respondents. They were eager to tell their stories. What follows are my observations and discoveries.

Driving across the rural heartland can be a depressing experience. It seems that every fourth or fifth farmstead is abandoned and gradually sinking into the soil upon which it once solidly stood. Rusted machinery, boarded-up windows, barn roofs open to the sky, overgrown groves, and chest-high Canadian thistles bear silent witness to broken dreams. About one of every four shops along the four-block main street of a typical town is closed, boarded-up, and for sale. Where there used to be three grocery stores or gasoline stations, there now is one.

Northern forests hide the poverty so visibly concentrated in urban areas. Mobile homes no longer mobile are scattered within the jack pine forests. In some counties, 70 to 80 percent of the land is controlled by the government, and use of forests and minerals is often

restricted, limiting jobs and preventing families from getting off welfare. Against a national average of 11 percent, 35 percent of the citizens of many rural communities are more than 65 years old. Fifty to 60 percent

of a typical rural medical practice may consist of Medicare, Medicaid, and Medical Assistance patients. Communities without industry are often precariously supported by a three-legged stool—school, clinic, hospital/nursing home. The demise of any one of the three can be devastating.

Physician Profile

The rural physicians I met are delightful and engaging men and women. They are egalitarian, not patronizing. They eschew medical mystification and believe in educating and empowering their patients. They rarely introduce themselves as

"doctor" or write M.D. after their names. They wear ties, white coats, and other symbols of status only if their patients prefer it that way. Limited specialty back-up requires that they be able to perform a wide range of procedures. The income of the rural physicians I surveyed, from those just beginning practice to those about to retire, averaged \$90,000.

The physicians I talked with said they attended an average of two medical conferences a year at tertiary teaching centers. They listed 29 different medical periodicals among their professional readings, with *JAMA* and *The New England Journal of Medicine* heading the list. Some mentioned such specialty journals as *Drug Therapy*, *Annals of Internal Medicine*, and *Clinical Obstetrician and Gynecologist*. Non-medical reading included authors such as Stephen Jay Gould, John Steinbeck, Barbara Tuchman, Stephen Hawking, Robert Hughes, Nikos Kazantzakis, and Eric Hanson.

Despite numerous frustrations, most physicians told me they love their practices and lifestyles, which allow them to enjoy nature, spend more time with their fami-



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Action: Yohimbine blocks presynaptic alpha-2 adrenergic receptors. Its action on peripheral blood vessels resembles that of reserpine, though it is weaker and of short duration. Yohimbine's peripheral autonomic nervous system effect is to increase parasympathetic (cholinergic) and decrease sympathetic (adrenergic) activity. It is to be noted that in male sexual performance, erection is linked to cholinergic activity and to alpha-2 adrenergic blockade which may theoretically result in increased penile inflow, decreased penile outflow or both.

Yohimbine exerts a stimulating action on the mood and may increase anxiety. Such actions have not been adequately studied or related to dosage although they appear to require high doses of the drug. Yohimbine has a mild anti-diuretic action, probably via stimulation of hypothalamic centers and release of posterior pituitary hormone.

Reportedly, Yohimbine exerts no significant influence on cardiac stimulation and other effects mediated by B-adrenergic receptors, its effect on blood pressure, if any, would be to lower it; however no adequate studies are at hand to quantitate this effect in terms of Yohimbine dosage.

Indications: Yocon[®] is indicated as a sympatholytic and mydriatic. It may have activity as an aphrodisiac.

Contraindications: Renal diseases, and patient's sensitive to the drug. In view of the limited and inadequate information at hand, no precise tabulation can be offered of additional contraindications.

Warning: Generally, this drug is not proposed for use in females and certainly must not be used during pregnancy. Neither is this drug proposed for use in pediatric, geriatric or cardio-renal patients with gastric or duodenal ulcer history. Nor should it be used in conjunction with mood-modifying drugs such as antidepressants, or in psychiatric patients in general.

Adverse Reactions: Yohimbine readily penetrates the (CNS) and produces a complex pattern of responses in lower doses than required to produce peripheral a-adrenergic blockade. These include, anti-diuresis, a general picture of central excitation including elevation of blood pressure and heart rate, increased motor activity, irritability and tremor. Sweating, nausea and vomiting are common after parenteral administration of the drug.^{1,2} Also dizziness, headache, skin flushing reported when used orally.^{1,3}

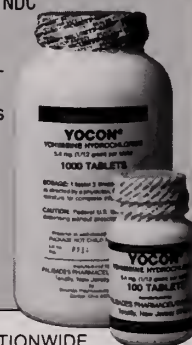
Dosage and Administration: Experimental dosage reported in treatment of erectile impotence.^{1,3,4} 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to 1/2 tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.³

How Supplied: Oral tablets of Yocon[®] 1/12 gr. 5.4 mg in bottles of 100's NDC 53159-001-01 and 1000's NDC 53159-001-10.

References:

1. A. Morales et al., New England Journal of Medicine: 1221, November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

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lies, live in egalitarian communities with low crime rates and little drug use, and perform a wide range of medical procedures. One mining-town physician found his patients' concern for his welfare particularly rewarding. Another physician described "the privileged participation in my patients' drama for life and dignity" as a benefit of rural practice.

Naturally, physicians reported drawbacks of rural practice as well, namely, incessant call demands, limited cultural activities, social isolation, government and third-party interference, and limited peer contact. Many also complained that they are treated as second-class citizens by their urban colleagues.

Rural Physician Opinions

The social contract

Rural physicians have two families—one biological, one social. Practicing on one's extended social family can be psychologically destructive. The inviolate covenant linking healer and community during medicine's Golden Age has become increasingly fragile. Before World War II, it was inconceivable for a patient to sue the family physician. Today, it's commonplace; three-fourths of the survey respondents said they had been sued by a patient.

"Without some armor, [litigious patients] will chew you up and spit you out," said one physician. In fact, the wounds sometimes become so deep that physicians find it hard to continue practicing. A number of physicians indicated they had become increasingly withdrawn, defensive, and guarded in their relationships with patients.

Medicare: a malevolent system?

Before the recent implementation of the resource-based relative value scale (RBRVS) and Minnesota's shift to a single Medicare payment district, northern and southern Minnesota were fourth and second, respectively, from the bottom of 247 Medicare reimbursement localities nationwide. Rural physicians said they support RBRVS but feel its five-year phase-in will be too slow to prevent physician exodus and the closure of many hospitals and clinics.

Middle-aged physicians, especially, seem to feel trapped. With their older colleagues retiring, some said they wonder how long they can continue to maintain their own practices under an increased patient load.

Medical education

With the exception of a few older physicians, the men and women interviewed tended to report feeling some animus toward medical education. Most felt "the system" denigrates the L.M.D. (local medical doctor) and discourages medical students from returning to their communities. Respondents said residents are socialized into believing rural docs are "hicks in the boonies" practicing by "flashlights and candles." A discouraging, "Why would you want to go out there?" might be an attending physician's response to someone interested in rural practice. Those surveyed believe the system undermines students' confidence and makes them passive and

fearful of caring for patients without subspecialty back-up. Several said they believe members of the medical/research/education establishment have lost their ability to empathize with students and patients.

Older physicians said they are astonished at the "meism" of residency graduates, most of whom they say want \$70,000 and benefits for 35 hours a week and one night of call in four. The average search for a new physician takes two years, costs \$75,000, and may necessitate a new car or a \$10,000 bonus. Some physicians said that too many demands by new physicians can lead to animosity and slower integration into the group.

Possible Prescriptions for Rural Medicine

The future of rural health care delivery seems discouraging, but it's not bleak. While it may be unrealistic to expect physicians to stay in counties where the population and economic base are eroding, the following suggestions might retard physician flight.

Emphasize the positive: In spite of frustration, rural physicians are happy with their practices and lifestyles. Few regret their decision to locate in a small town, and they want to stay. They receive far more prestige within their communities than their urban peers, and they find the wider scope of practice appealing. Financial relief, while not perfect, is here in the form of RBRVS.

Clearly, the medical establishment must find ways to emphasize these positive aspects of rural practice. For example, medical schools could make personal narratives about both the joys and challenges of rural practice, such as David Hilfiker's "Healing the Wounds: A Physician Looks at His Work," part of medical education.

Nurture future rural physicians: Today's physicians need to work with educators, businesses, farm organizations, and other groups to encourage students to consider rural medicine as a career. Some physicians find ways to support pre-med students in college, send them notes of encouragement, and invite them to go on rounds.

Enhance student/practitioner contacts: Experience shows that a weekend or month-long contact with rural clinics is too short to overcome a physician's possible bias toward small towns. Working with a physician for nine to 12 months after the sophomore year in medical school often successfully counteracts this negative bias. The University of Minnesota's Rural Physician Associate Program is nationally renowned in this regard and returns about 57 percent of its participants to rural practice. The University of Minnesota-Duluth School of Medicine is also successful, with 60 percent of its graduates practicing in non-metropolitan areas—40 percent of those in towns of 20,000 or less. Such programs deserve widespread support.

Regionalize: Rural practitioners will survive only through financial and administrative cooperative arrangements with regional clinics and hospitals (see also "Rural Health Care Delivery: Survival May Require an Integrated Model," page 43). This can provide relief from the major burden of rural practice—unremitting pressure from evening and weekend call—and stabilize income levels. The price of such security may mean

increased bureaucracy, but a shift to larger administrative units is the trend in most organizations today.

Challenge the subspecialty dominance in medical education: Rural physicians believe medical schools are poorly serving the areas where they practice. They ask that public institutions serve public needs—that there be greater equity between primary physicians and proceduralists. The doctors interviewed tend to believe medical schools are elitist, isolated, and overly concerned about issues that enhance their own status. Medical educators should address these problems.

The Few—The Proud

No geographical site meets all the criteria for the idyllic life, whether personal or professional. Because of troublesome economics and demographics, rural medicine faces a problematic future. Nevertheless, just as the elite United States Marine Corps has always appealed to "the few—the proud," the challenge of bringing healing to an isolated community will continue to attract many of noble character. Although these doctors should know that authentic motivation must come from within themselves, the evidence is clear that their rewards—personal, familial, and professional—are a kind not shared by their urban colleagues. MM

Walter Benjamin is a professor of ethics at Hamline University in St. Paul, Minnesota. He specializes in biomedical and business ethics and is a member of Park Nicollet Medical Center's Medical Ethics Committee.

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* See DOSAGE AND ADMINISTRATION section of prescribing information.

† If, after an adequate trial of ACCUPRIL alone, based on your medical judgment as the prescribing physician, you determine that your patient requires the addition of a diuretic, Parke-Davis will refund to the patient his/her cost for the diuretic prescription less any amount reimbursed or paid for by an HMO, insurance company, or any other plan or program.

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‡ In some patients, the antihypertensive effect may diminish toward the end of the once-daily dosing interval. In such patients, an increase in dosage or twice-daily administration may be warranted.

ACCUPRIL is available in 10, 20, and 40 mg tablets. Usual initial starting dosage is 10 mg once daily.

ACCUPRIL is contraindicated in patients who are hypersensitive to this product and in patients with a history of angioedema related to previous treatment with an ACE inhibitor.

Please see brief summary of prescribing information on following page.

Accupril® (Quinapril Hydrochloride Tablets)

Before prescribing, please see full prescribing information. A brief summary follows.

INDICATIONS AND USAGE

ACCUPRIL is indicated for the treatment of hypertension. It may be used alone or in combination with thiazide diuretics.

In using ACCUPRIL, consideration should be given to the fact that another angiotensin-converting enzyme (ACE) inhibitor, captopril, has caused agranulocytosis, particularly in patients with renal impairment or collagen vascular disease. Available data are insufficient to show that ACCUPRIL does not have a similar risk (see WARNINGS).

CONTRAINDICATIONS

ACCUPRIL is contraindicated in patients who are hypersensitive to this product and in patients with a history of angioedema related to previous treatment with an ACE inhibitor.

WARNINGS

Angioedema: Angioedema of the face, extremities, lips, tongue, glottis, and larynx has been reported in patients treated with ACE inhibitors and has been seen in 0.1% of patients receiving ACCUPRIL. Angioedema associated with laryngeal edema can be fatal. If laryngeal stridor or angioedema of the face, tongue, or glottis occurs, treatment with ACCUPRIL should be discontinued immediately, the patient treated in accordance with accepted medical care, and carefully observed until the swelling disappears. In instances where swelling is confined to the face and lips, the condition generally resolves without treatment; antihistamines may be useful in relieving symptoms.

Where there is involvement of the tongue, glottis, or larynx likely to cause airway obstruction, emergency therapy including, but not limited to, subcutaneous epinephrine solution 1:1000 (0.3 to 0.5 mL) should be promptly administered (see ADVERSE REACTIONS).

Hypotension: Symptomatic hypotension was rarely seen in uncomplicated hypertensive patients treated with ACCUPRIL but, as with other ACE inhibitors, it is a possible consequence of therapy in salt/volume depleted patients, such as those previously treated with diuretics or dietary salt restriction or who are on dialysis (see PRECAUTIONS, DRUG INTERACTIONS, and ADVERSE REACTIONS). In controlled studies, syncope was observed in 0.4% of patients (N=3203); this incidence was similar to that observed for captopril (1%) and enalapril (0.8%).

In patients with concomitant congestive heart failure, with or without associated renal insufficiency, ACE inhibitor therapy may cause excessive hypotension, which may be associated with oliguria or azotemia and, rarely, with acute renal failure and death. In such patients, ACCUPRIL therapy should be started at the recommended dose under close medical supervision. These patients should be followed closely for the first 2 weeks of treatment and whenever the dosage of antihypertensive medication is increased (see DOSAGE AND ADMINISTRATION).

If symptomatic hypotension occurs, the patient should be placed in the supine position and, if necessary, normal saline may be administered intravenously. A transient hypotensive response is not a contraindication to further doses; however, lower doses of ACCUPRIL or reduced concomitant diuretic therapy should be considered.

Neutropenia/Agranulocytosis: Another ACE inhibitor, captopril, has been shown to cause agranulocytosis and bone marrow depression rarely in patients with uncomplicated hypertension, but more frequently in patients with renal impairment, especially if they also have a collagen vascular disease such as systemic lupus erythematosus or scleroderma. Agranulocytosis did occur during ACCUPRIL treatment in one patient with a history of neutropenia during previous captopril therapy. Available data from clinical trials of ACCUPRIL are insufficient to show that, in patients without prior reactions to other ACE inhibitors, ACCUPRIL does not cause agranulocytosis at similar rates. As with other ACE inhibitors, periodic monitoring of white blood cell counts in patients with collagen vascular disease and/or renal disease should be considered.

Fetal/Neonatal morbidity and mortality: ACE inhibitors, including ACCUPRIL, can cause fetal and neonatal morbidity and mortality when administered to pregnant women.

When ACE inhibitors have been used during the second and third trimesters of pregnancy, there have been reports of hypotension, renal failure, skull hypoplasia, and death. Oligohydramnios has also been reported, presumably resulting from decreased fetal renal function; oligohydramnios has been associated with fetal limb contractures, craniofacial deformities, hypoplastic lung development, and intrauterine growth retardation.

Prematurity and patent ductus arteriosus have been reported, although it is not clear whether these occurrences were due to the ACE-inhibitor exposure or to the mother's underlying disease. It is not known whether exposure limited to the first trimester can adversely affect fetal outcome.

A patient who becomes pregnant while taking ACE inhibitors, or who takes ACE inhibitors when already pregnant, should be apprised of the potential hazard to her fetus. If she continues to receive ACE inhibitors during the second or third trimester of pregnancy, frequent ultrasound examinations should be performed to look for oligohydramnios. When oligohydramnios is found, ACE inhibitors should generally be discontinued.

Infants with histories of in utero exposure to ACE inhibitors should be closely observed for hypotension, oliguria, and hyperkalemia. If oliguria occurs, attention should be directed toward support of blood pressure and renal perfusion. Hemodialysis and peritoneal dialysis have little effect on the elimination of quinapril and quinaprilat.

No fetotoxic or teratogenic effects were observed in rats at quinapril doses as high as 300 mg/kg/day (180 and 30 times the maximum daily human dose when based on mg/kg and mg/m², respectively), despite maternal toxicity at 150 mg/kg/day. Tested later in gestation and during lactation, reduced offspring body weight was seen at ≥ 25 mg/kg/day, and changes in renal histology (juxtaglomerular cell hypertrophy, tubular/pelvic dilation, glomerulosclerosis) were observed both in dams and offspring treated with 150 mg/kg/day. Quinapril was not teratogenic in the rabbit; however, as noted with other ACE inhibitors, maternal toxicity and embryotoxicity were seen in some rabbits at quinapril doses as low as 0.5 mg/kg/day (one time the recommended human dose) and 1.0 mg/kg/day, respectively.

PRECAUTIONS

General

Impaired renal function: As a consequence of inhibiting the renin-angiotensin-aldosterone system, changes in renal function may be anticipated in susceptible individuals. In patients with severe heart failure whose renal function may depend on the activity of the renin-angiotensin-aldosterone system, treatment with ACE inhibitors, including ACCUPRIL, may be associated with oliguria and/or progressive azotemia and rarely acute renal failure and/or death.

In clinical studies in hypertensive patients with unilateral or bilateral renal artery stenosis, increases in blood urea nitrogen and serum creatinine have been observed in some patients following ACE inhibitor therapy. These increases were almost always reversible upon discontinuation of the ACE inhibitor and/or diuretic therapy. In such patients, renal function should be monitored during the first few weeks of therapy.

Some hypertensive patients with no apparent preexisting renal vascular disease have developed increases in blood urea and serum creatinine, usually minor and transient, especially when ACCUPRIL has been given concomitantly with a diuretic. This is more likely to occur in patients with preexisting renal impairment. Dosage reduction and/or discontinuation of any diuretic and/or ACCUPRIL may be required.

Evaluation of hypertensive patients should always include assessment of renal function (see DOSAGE AND ADMINISTRATION).

Hyperkalemia and potassium-sparing diuretics: In clinical trials, hyperkalemia (serum potassium ≥ 5.8 mmol/L) occurred in approximately 2% of patients receiving ACCUPRIL. In most cases, elevated serum potassium levels were isolated values which resolved despite continued therapy. Less than 0.1% of patients discontinued therapy due to hyperkalemia. Risk factors for the development of hyperkalemia include renal insufficiency, diabetes mellitus, and the concomitant use of potassium-sparing diuretics, potassium supplements, and/or potassium-containing salt substitutes, which should be used cautiously, if at all, with ACCUPRIL (see PRECAUTIONS, Drug Interactions).

Surgery/anesthesia: In patients undergoing major surgery or during anesthesia with agents that produce hypotension, ACCUPRIL will block angiotensin II formation secondary to compensatory renin release. If hypotension occurs and is considered to be due to this mechanism, it can be corrected by volume expansion.

Information for Patients

Angioedema: Angioedema, including laryngeal edema, can occur with treatment with ACE inhibitors, especially following the first dose. Patients should be so advised and told to report immediately any signs or symptoms suggesting angioedema (swelling of face, extremities, eyes, lips, tongue, difficulty in swallowing or breathing) and to stop taking the drug until they have consulted with their physician (see WARNINGS).

Symptomatic hypotension: Patients should be cautioned that lightheadedness can occur, especially during the first few days of ACCUPRIL therapy, and that it should be reported to a physician. If actual syncope occurs, patients should be told to not take the drug until they have consulted with their physician (see WARNINGS).

All patients should be cautioned that inadequate fluid intake or excessive perspiration, diarrhea, or vomiting can lead to an excessive fall in blood pressure because of reduction in fluid volume, with the same consequences of lightheadedness and possible syncope.

Patients planning to undergo any surgery and/or anesthesia should be told to inform their physician that they are taking an ACE inhibitor.

Hyperkalemia: Patients should be told not to use potassium supplements or salt substitutes containing potassium without consulting their physician (see PRECAUTIONS).

Accupril® (Quinapril Hydrochloride Tablets)

Neutropenia: Patients should be told to report promptly any indication of infection (eg, sore throat, fever) which could be a sign of neutropenia.

NOTE: As with many other drugs, certain advice to patients being treated with ACCUPRIL is warranted. This information is intended to aid in the safe and effective use of this medication. It is not a disclosure of all possible adverse or intended effects.

Drug Interactions

Concomitant diuretic therapy: As with other ACE inhibitors, patients on diuretics, especially those on recently instituted diuretic therapy, may occasionally experience an excessive reduction of blood pressure after initiation of therapy with ACCUPRIL. The possibility of hypotensive effects with ACCUPRIL may be minimized by either discontinuing the diuretic or cautiously increasing salt intake prior to initiation of treatment with ACCUPRIL. If it is not possible to discontinue the diuretic, the starting dose of quinapril should be reduced (see DOSAGE AND ADMINISTRATION).

Agents increasing serum potassium: Quinapril can attenuate potassium loss caused by thiazide diuretics and increase serum potassium when used alone. If concomitant therapy of ACCUPRIL with potassium-sparing diuretics (eg, spironolactone, triamterene, or amiloride), potassium supplements, or potassium-containing salt substitutes is indicated, they should be used with caution along with appropriate monitoring of serum potassium (see PRECAUTIONS).

Tetracycline and other drugs that interact with magnesium: Simultaneous administration of tetracycline with ACCUPRIL reduced the absorption of tetracycline by approximately 28% to 37%, possibly due to the high magnesium content in ACCUPRIL tablets. This interaction should be considered if coprescribing ACCUPRIL and tetracycline or other drugs that interact with magnesium.

Lithium: Increased serum lithium levels and symptoms of lithium toxicity have been reported in patients receiving concomitant lithium and ACE inhibitor therapy. These drugs should be co-administered with caution, and frequent monitoring of serum lithium levels is recommended. If a diuretic is also used, it may increase the risk of lithium toxicity.

Other agents: Drug interaction studies of ACCUPRIL with other agents showed:

- Multiple dose therapy with propranolol or cimetidine has no effect on the pharmacokinetics of single doses of ACCUPRIL.
- The anticoagulant effect of a single dose of warfarin (measured by prothrombin time) was not significantly changed by quinapril coadministration twice-daily.
- ACCUPRIL treatment did not affect the pharmacokinetics of digoxin.
- No pharmacokinetic interaction was observed when single doses of ACCUPRIL and hydrochlorothiazide were administered concomitantly.

Carcinogenesis, Mutagenesis, Impairment of Fertility

Quinapril hydrochloride was not carcinogenic in mice or rats when given in doses up to 75 or 100 mg/kg/day (50 to 60 times the maximum human daily dose, respectively, on a mg/kg basis and 3.8 to 10 times the maximum human daily dose when based on a mg/m² basis) for 104 weeks. Female rats given the highest dose level had an increased incidence of mesenteric lymph node hemangiomas and skin/subcutaneous lipomas. Neither quinapril nor quinaprilat were mutagenic in the Ames bacterial assay with or without metabolic activation. Quinapril was also negative in the following genetic toxicology studies: *in vitro* mammalian cell point mutation, sister chromatid exchange in cultured mammalian cells, micronucleus test with mice, *in vitro* chromosome aberration with V79 cultured lung cells, and *in vivo* cytogenetic study with rat bone marrow. There were no adverse effects on fertility or reproduction in rats at doses up to 100 mg/kg/day (60 and 10 times the maximum daily human dose when based on mg/kg and mg/m², respectively).

Pregnancy

Pregnancy Category D: See WARNINGS, Fetal/Neonatal morbidity and mortality.

Nursing Mothers

It is not known if quinapril or its metabolites are secreted in human milk. Quinapril is secreted to a limited extent, however, in milk of lactating rats (5% or less of the plasma drug concentration was found in rat milk). Because many drugs are secreted in human milk, caution should be exercised when ACCUPRIL is given to a nursing mother.

Geriatric Use

Elderly patients exhibited increased area under the plasma concentration time curve (AUC) and peak levels for quinapril compared to values observed in younger patients; this appeared to relate to decreased renal function rather than to age itself. In controlled and uncontrolled studies of ACCUPRIL where 918 (21%) patients were 65 years and older, no overall differences in effectiveness or safety were observed between older and younger patients. However, greater sensitivity of some older individual patients cannot be ruled out.

Pediatric Use

The safety and effectiveness of ACCUPRIL in children have not been established.

ADVERSE REACTIONS

ACCUPRIL has been evaluated for safety in 4960 subjects and patients. Of these, 3203 patients, including 655 elderly patients, participated in controlled clinical trials. ACCUPRIL has been evaluated for long-term safety in over 1400 patients treated for 1 year or more.

Adverse experiences were usually mild and transient.

Discontinuation of therapy because of adverse events was required in 4.7% of patients treated with ACCUPRIL in placebo-controlled hypertension trials.

Adverse experiences probably or possibly related to therapy or of unknown relationship to therapy occurring in 1% or more of the 1563 patients in placebo-controlled hypertension trials who were treated with ACCUPRIL are shown below.

Adverse Events in Placebo-Controlled Trials

	ACCUPRIL (N = 1563) Incidence (Discontinuation)	Placebo (N = 579) Incidence (Discontinuation)
Headache	5.6 (0.7)	10.9 (0.7)
Dizziness	3.9 (0.8)	2.6 (0.2)
Fatigue	2.6 (0.3)	1.0
Coughing	2.0 (0.5)	0.0
Nausea/Vomiting	1.4 (0.3)	1.9 (0.2)
Abdominal Pain	1.0 (0.2)	0.7

Clinical adverse experiences probably or possibly related, or of uncertain relationship to therapy, occurring in 0.5% to 1.0% (except as noted) of the patients treated with ACCUPRIL (with or without concomitant diuretic) in controlled or uncontrolled trials (N = 4397) and less frequent, clinically significant events seen in clinical trials or post-marketing experience (the rarer events are in italics) include (listed by body system):

General: back pain, malaise

Cardiovascular: palpitation, vasodilation, tachycardia, heart failure, hyperkalemia, myocardial infarction, cerebrovascular accident, hypertensive crisis, angina pectoris, orthostatic hypotension, cardiac rhythm disturbances

Gastrointestinal: dry mouth or throat, constipation, gastrointestinal hemorrhage, pancreatitis, abnormal liver function tests

Nervous/Psychiatric: somnolence, vertigo, syncope, nervousness, depression

Integumentary: increased sweating, pruritus, exfoliative dermatitis, photosensitivity reaction

Urogenital: acute renal failure

Other: amblyopia, pharyngitis, sinusitis, bronchitis, agranulocytosis, thrombocytopenia

Angioedema: angioedema has been reported in patients receiving ACCUPRIL (0.1%). Angioedema associated with laryngeal edema may be fatal. If angioedema of the face, extremities, lips, tongue, glottis, and/or larynx occurs, treatment with ACCUPRIL should be discontinued and appropriate therapy instituted immediately (See WARNINGS).

Clinical Laboratory Test Findings

Hematology: (See WARNINGS)

Hyperkalemia: (See PRECAUTIONS)

Creatinine and blood urea nitrogen: Increases (>1.25 times the upper limit of normal) in serum creatinine and blood urea nitrogen were observed in 2% and 2%, respectively, of patients treated with ACCUPRIL alone. Increases are more likely to occur in patients receiving concomitant diuretic therapy than in those on ACCUPRIL alone. These increases often remit on continued therapy.

* In some patients, the antihypertensive effect may diminish toward the end of the once-daily dosing interval. In such patients, an increase in dosage or twice-daily administration may be warranted.



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"I have never gotten used to people dying. And I don't want to get used to it."

Dr. Aliza Lifshitz, Internist, Los Angeles, California, Member, American Medical Association

Patients come to physicians for many reasons. Beyond relief from pain, they seek compassion, empathy and support. AIDS patients receive all of these and more from Dr. Aliza Lifshitz.

Born and raised in Mexico and educated at one of Mexico City's finest medical schools, Dr. Lifshitz now serves the Hispanic community in Southern California. Over a third of her patients have tested HIV positive. Most live below the poverty level. Many are illegal aliens.

"I never forget what it means to be a doctor, and what it means is embodied in the Principles of Medical

Ethics of the American Medical Association (AMA)," states Dr. Lifshitz.

You are invited to join Dr. Lifshitz and to join with her in her efforts to bring quality health care to those in need. Become a member of the American Medical Association today.

Members of the AMA are encouraged to join their state, county and specialty societies.

American Medical Association

Physicians dedicated to the health of America





Breen on the set just after the 10 p.m. news.

..... TV Doctor, Michael Breen

By Ralph C. Heussner, Jr.

Photos by Rob Levine

Michael Breen, M.D., has the largest practice in the state of Minnesota, but he actually sees only a few patients each week—and he has no clinic of his own! Although licensed in Minnesota as a general practitioner, he specializes in preventive medicine. He is disillusioned by a health care system that he claims is motivated by profit, yet he interacts daily with leaders of the medical establishment.

Some doctors grimace when they hear his voice; others welcome his phone calls.

Despite the contradictions, Dr. Michael Breen is probably one of the most influential physicians in Minnesota. He decides what the public knows about the latest medical developments.

In case you don't recognize his name, you certainly know him by his moniker, "TV doctor."



It's 9:30 a.m., and Dr. Breen has just left a brief meeting of news editors and reporters at WCCO-TV. He's obviously excited because a story he pitched has been selected for the 10 p.m. news—the most watched TV newscast in the Twin Cities market. The story is about condoms for women, and Breen believes he will be the first and only reporter with the story. It's certainly going to raise the eyebrows of some

viewers, and probably bolster the ratings.

Breen has already arranged to interview several women at the Meadowbrook Clinic in the early afternoon, so he will spend the morning developing future stories, reading medical journals, checking the mail—as many as 30 to 50 letters and news releases a day—and responding to dozens of phone calls.

"I'm on every health and medical mailing list in the world—the American Red Cross, Arthritis Association, Sjögren's Syndrome Foundation. You name it. Everyone wants publicity," he says.

Since 1979, Breen has followed the daily schedule of a full-time reporter—first at Channel 11, then Channel 5, and, most recently, at Channel 4. He has turned down job offers in Philadelphia and New York. He is one of an estimated 250 physicians nationwide who appear on radio or television, at least on a part-time basis. And that number seems to be growing.

"Medical journalists with an M.D. are hot commodities," Breen acknowledges. "But I've chosen to stay in the Twin Cities largely due to personal reasons, as well as professional ones. It's not uncommon for someone who is popular in one market to go to another city and literally become a laughing stock."

Breen, 39, and his wife, Kimberly, a former television reporter in Atlanta, have made roots in the Twin Cities. They have a 1-year-old son,

Michael Jr., and a second child on the way. Breen has another son, Matthew, age 7, from a previous marriage.

In the Beginning: The Disillusionment

Like most young physicians, Breen was an idealist when he entered medicine. He received his M.D. from Albert Einstein College of Medicine in New York in 1977 and went on to Duke University for an internship in internal medicine.

"I became a physician because I thought medicine was magic," he says. "I believed that if a patient was sick and wanted to get better, all you had to do was perform a few tests, prescribe the pills, and the patient shook your hand and went on to live a wonderful life. That was my image of medicine. But then, when I was an intern at Duke working with a VA population, I found that two-thirds of my patients had self-induced disease created by alcohol, cigarettes, or obesity. I also found that many patients were unwilling to take responsibility for their own health. They were more interested in being handed some kind of magic bullet. I found this very disillusioning.

"I was also disillusioned by another aspect of medicine. In my mind, the medical system was purposely not treating people until they became ill, because that's where the money is. There's no money in prevention; all the money is waiting for somebody to develop heart disease and then [need] the bypass."

There was a third element to the disillusionment of young Dr. Breen. It had to do with the attitudes of some physicians toward their patients. He said: "Many doctors purposely maintain a mystique that medicine is



Michael Breen had his face made up before a live appearance on WCCO-TV's 10 p.m. newscast.



Breen answers questions from anchor Don Shelby during a live broadcast of the 10 p.m. news.

beyond the capacity of patients to understand. They act like members of an ancient guild where people protect their store of knowledge."

So Breen took a leave of absence from the Duke residency program to pursue a graduate degree at the Columbia School of Journalism. His father a novelist and playwright and his mother a widely published magazine writer, Breen initially put his sights on medical writing. But an academic adviser, who was also a CBS-TV producer, encouraged him to consider television because of the potential to reach a larger audience. The adviser, unbeknownst to Breen, had given his name to a "head-hunter" for Metro-Media, which owned television stations around the country, including Channel 11 in Minneapolis.

"The headhunter called me and said he heard that I was a good writer but wanted to know how I looked in front of the camera. I told him, 'My friends tell me I'm terrific on camera,' although I had never been in front of a TV camera in my life," Breen recalls.

That evening, Breen went to the local NBC affiliate to tape a five-minute video that would decide his future. He was asked to read a weather report! Only a few months shy of completing his journalism degree, Breen accepted a job with Channel 11 in the Twin Cities. His starting salary was approximately one-third of that of a young physician; today he says he earns nearly as much as he could in clinical practice.

Gaining Acceptance, Building Trust

Despite his medical background, Breen does not have an automatic entree to physicians as news sources. "I sometimes have to convince the physician that I'm not trying to deceive him and talk about a malpractice case from 10

years ago," he says. "Physicians who don't know me worry about the skeleton in the closet, worry about looking stupid on the air, or worry about whether they can trust me."

Many physicians who meet Breen for the first time question his credentials as an M.D. "I run into that problem a lot," he says. "Very often, I have to prove that I'm a physician. They look at me and say, 'Is he a real doctor? How smart is he? He's in television.'"

Breen builds a bridge of confidence by using the knowledge he gained in medical school.

"If I'm interviewing a kidney expert, I'll start talking about glomerulonephritis while the camera is setting up. I'll be paying my dues by using the big terms and showing [the physician] that I understand a lot more about kidney disease than he or she thought," Breen says.

But when the camera starts rolling, and the physician is conversing doctor-to-doctor in technical language, Breen faces another obstacle. Although the physician now feels comfortable in the interview, the technical language is unusable on the air. Breen must now encourage the doctor to talk to the camera as though she's talking to patients.

"If I were a naive reporter, the physician might be a little more elementary, talking layman's language, and it would be easier to get a sound bite," Breen says.

"I became a physician because I thought medicine was magic. But I found that many patients were unwilling to take responsibility for their own health."

Some physicians are reluctant to grant Breen an interview simply because he is a doctor. "They don't have the same superiority that they are used to in the normal patient-physician relationship," Breen surmises. "Therefore, some physicians are more likely to be a little tense. And what do physicians do when they're tense and uncomfortable? They resort to jargon, and all I end up with is a lot of jargon on camera."

The first 10 minutes of the interview are crucial to the success of the story. "On one hand, I have to show them that I can discuss medical issues on their level, but on the other hand, I have to not threaten them," he says.

"And, of course, I have to make sure that when the camera starts rolling, they are talking to a layman."

Hot Buttons:

Patient Privacy, News Embargoes

The two subjects most likely to strike a sensitive chord with medical reporters are patient privacy and news embargoes. Breen is no exception.

"Patient privacy is a legitimate concern," he agrees, "but my consistent experience has been it is most often used by hospital public relations as a smoke screen to control the story. They tell you, 'Don't be aggressive in trying to contact the patient or interfering, because the patient wants privacy.' It's a matter of turf fighting and an attempt by hospitals to set the agenda so nobody gets

a break. If I'm the first at John Thompson [the North Dakota teenager who recently underwent surgical re-attachment of both arms after a farm accident]... then the hospital has alienated some other media. So they try to discourage you by saying this patient really wants privacy. And it can occur in the most egregious circumstances. In some cases, I will have a patient calling me upset with hospital treatment and then PR will say, 'No, you can't interview that patient because you are violating their privacy.' Patients almost invariably are willing to share their story, and many find it therapeutic to share their story."

Breen acknowledges a self-interest in his desire to gain access to patients. Without patients, a story will not sell. Breen explains: "Let's say I do a story about the risk factors for heart disease. I can get in front of a camera and

More TV Health Talk

Paul G. Quie, M.D., is probably one of the most unlikely physicians to be talking about medicine on television. By his own admission, he rarely watches the tube, and when he does, it's usually an athletic event.

But when the University of Minnesota went looking for a host for "Health Talk and You" back in 1987, there really was no question that Quie, professor of pediatrics with a specialty in infectious diseases, was the man for the job.

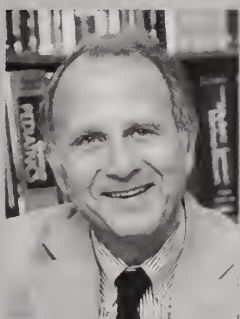
"We wanted a person who had credibility with both the medical staff and the community, and a person whose name has immediate recognition among the doctors," says Sally Howard, head of the University's Health Sciences Public Relations Office, who helped organize the program. "We knew that Dr. Quie would be perfect for the job."

Since its debut in February 1988 on KTCI-TV in Minneapolis, the weekly half-hour program has aired 140 segments live, discussing topics ranging from arthritis to atherosclerosis, from glaucoma to gout.

"The purpose of the program is basically to educate the public. We are providing a service by giving them accurate information from some of the leading specialists in a particular disease," says Quie.

The show consists of Quie and three guests drawn from the university faculty and community physicians. After a brief introduction of the subject by Quie, the phone lines are opened to viewers. And the phones never stop ringing!

In contrast to commercial television, the format



Paul G. Quie, M.D.

is bland—no video clips of surgery or modern medical technology in operation and no testimonials from patients. Nonetheless, the show appears to be hitting its mark. An average of 120 viewers call after each show requesting a brochure with details about the disease in question, and from 30 to 60 persons call every Tuesday night with questions. The station estimates the show has 7,000 to 10,000 viewers.

"I like to think that our program allows enough time so we can thoroughly discuss an issue—from diagnosis to treatment and, of course, prevention," Quie says. "But some subjects are so complicated that we need two shows to really examine them in detail. We recently took two weeks for arthritis."

Although Quie is reluctant to criticize commercial TV's coverage of medical topics, he did observe that the prime-time news often raises viewers' expectations whenever it airs a story about new treatments, thus creating false hopes. He also emphasizes that a medical news program can't replace a trip to the doctor.

"I know from our questions that people are often looking for a second opinion or more information about their particular treatment. What we try and do is encourage the caller to see a physician," Quie says.

Funding for "Health Talk and You" is provided by the University of Minnesota Hospital & Clinic, the Medical School, and Minnesota Medical Foundation. Quie, the guest physicians, and health science students, who answer the phones, all volunteer their time.



After a 2 p.m. interview, Breen went home to rest and spend time with his family. He was back before the 10 p.m. newscast so he could review the editing of his tapes.

say 'watch your cholesterol, watch for high blood pressure, don't smoke, and exercise regularly.' If I do that, everybody will turn the channel. Who cares? But if I present you with a 35-year-old man with two young children who's now waiting for a heart transplant, and he admits that he ignored his lifestyle his whole life and now wishes that he could do it all again—because he's worried he won't be a father for his children—everybody watching is going to go, 'Oh, my goodness.' Then, you sneak in the message: here are the lifestyle factors you need to control."

Breen views news embargoes as another example of institutions trying to exercise control over the news media. *The New England Journal of Medicine* and the *Journal of the American Medical Association* both impose arbitrary news release dates with their weekly publications. A reporter who violates the embargo runs the risk of having his journal subscription canceled.

"The argument that physicians should have time to assimilate information before it is presented to the press is a red herring," Breen contends. "Like so many issues, it gets back to control. The journal wants to control when information is released. But I believe that if the information is out there, it should be presented and nobody should be sitting on it. We will, in some cases, break embargoes if we feel they are arbitrary and there's no public service gained by keeping an embargo."

Breen argues that the slowness of the editorial process does more harm to patients than news organizations do when they break embargoes, and he points to the delays in publishing results of studies of new AIDS treatments and a recent treatment for spinal cord injuries. "Information that could have prevented paralysis in thousands of cases was delayed in the

editorial process," he says.

There is a professional reason that reporters dislike embargoes; it means all media will have the story at the same time. "I admit that I like to be first with the story," Breen says. "But an embargo ensures I will do the story the same time everyone else does. So who is going to remember Dr. Michael Breen if I do the same story that Channel 5 and Channel 11 do on the same day?"

Handling Criticism

Television medical news is most frequently criticized for simplifying and, in the process, distorting, complex medical information.

"The fundamental question is do you do more harm than good by taking a complex medical topic and describing it in 90 seconds? There are good and bad aspects to what I do," says Breen. "We will oversimplify and we will miss the nuances. On the other hand, I view my job as one of raising questions, and not providing definitive answers. I also ask myself, do people know more after my two-minute story? They usually do because they have learned two or three facts that extend their knowledge of kidney disease, heart disease, migraines, or whatever. I think the bottom line is people are better off with information. But we do miss shades of gray, and we do oversimplify."

Another criticism of TV news is that it is entertainment in disguise.

"I'll make no bones about that," Breen agrees. "People don't watch to be educated; they watch TV news for the same value they get in prime time. They want to connect with other people. They want to feel emotion. And the only way I can deliver my medical message and educate people is if I play that game. I have to hook you with someone's personal medical story, then I have to slide the medical message in through the back door,

"People don't watch
to be educated; they
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to feel emotion."

because I would be off the air in two weeks if I simply sat in front of the camera and lectured: 'This is what you need to know about glaucoma, cancer, heart disease.'"

Breen pauses to reflect: "I admit that I once was working under the delusion that people would watch medical news to save their lives. They don't. They watch medical news for the same reason they watch everything else—to feel something."

Covering AIDS

Covering the AIDS epidemic has been the most challenging story of Breen's journalistic career. And the particular story that caused him the most agony was the revelation last summer that a Minnesota physician with AIDS was continuing to practice despite open sores on his arms.

Breen defends WCCO-TV's coverage of the controversy. Although he was not on the air during the past year because of a contract stipulation at his previous employer, KSTP-TV, he directed the Channel 4 news team and wrote most of the stories about Dr. Philip Benson. Breen contends that WCCO-TV was the first to know about the case but delayed airing the story until confirming all the facts. A competing station broke the story "with less than 10 percent of the information that we had, and a lot of theirs was inaccurate," Breen says. "Yet we were criticized for going with the story when we actually sat on it for several days, scurrying like crazy, following false leads that the Department of Health gave us to keep us out of their hair. We finally put it on the air and did our best to be balanced."

But objectivity and balance are sometimes difficult to attain. The Benson case illustrates the difficulty of telling emotion-packed and controversial medical stories on television.



On a news team, everyone must pitch in. Breen carries the tripod on the way to an interview.

"Television is an emotional medium," Breen says. "You can deliver all the facts, but if one side has emotion and the other side does not, you are presenting a biased report. There were a lot of experts saying your odds [of getting AIDS from a physician] are minuscule, but they had very little chance against Kimberly Bergalis dying of AIDS and stating her case before the U.S. Senate. That's one of the fallacies of television. You can present nothing but truthful facts and still be biased—biased by over-

loading one side with emotion, or biased by choosing not to present other facts. The truth by itself is not an adequate defense when it comes to presenting a balanced point of view."

"I view my job as one of raising questions, and not providing definitive answers."

Breen believes that his medical training has helped him appreciate the actual risk of transmitting AIDS. This background also gave him a perspective on the Benson case that non-physician journalists don't have.

"What concerned me most about the case was the breakdown in the physician-patient relationship," Breen says. "Having experienced that trust and knowing how important it is in what you can do for patients, I felt a strong need to do all that we could to be balanced and objective. The long-term casualty of the whole AIDS scare is the breakdown of trust between patients and physicians. I know that as a practicing physician, 60 to 70 percent of what you do for patients is to look them in the eye and reassure them, or tell them that they're not in it alone. Creating antagonism between patient and physician undermines a critical part of what a physician does, and I think that's the unfortunate legacy of this whole issue."

Returning to Medical Practice?

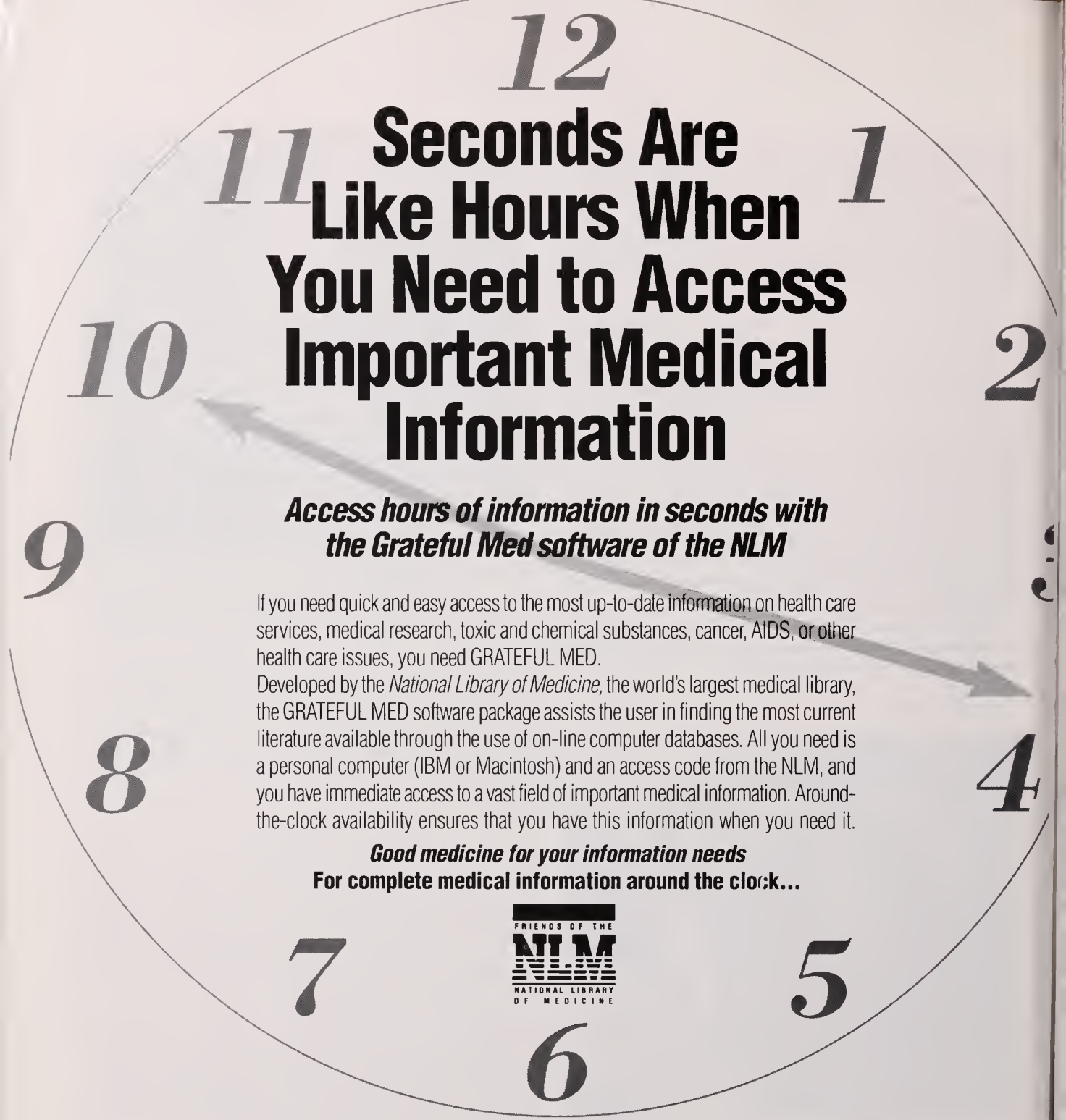
When Breen first began his medical-journalism career in Minneapolis, he had hoped to continue working part time as a physician. In fact, he had been hired to work in the emergency room of a local community hospital. But the pressures of television have prevented him from pursuing this interest.

Any chance Michael Breen will return to his clinical calling?

"It does cross my mind," he admits. "But it's been so long since I've cared for patients that I've lost the reflexes for many common illnesses. I've gained a lot of skills; I have the reflexes to put together a story, but my reflexes for patient care are pretty rusty."

"Yet there is part of me that would like to do everything. And, let's be honest, television is not a lifelong career. Part of me says that, maybe, someday, I'll go back into medicine—back to reality!" MM

Ralph Heussner is a medical writer and editor in the Department of Laboratory Medicine and Pathology at the University of Minnesota. He is the author of four books, including "Warning! The Media May Be Harmful to Your Health: A Consumer's Guide to Medical News and Advertising" (Andrews McMed, 1988).



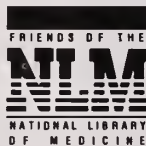
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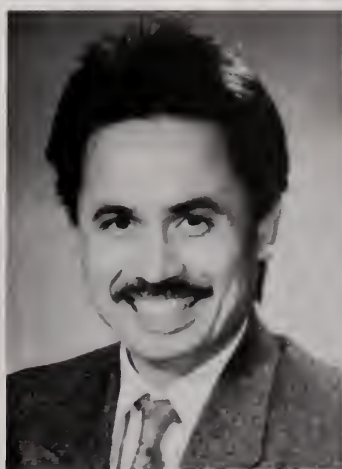
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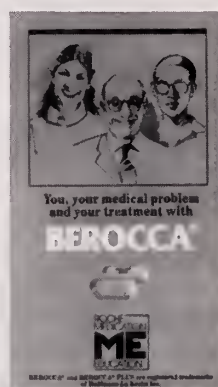
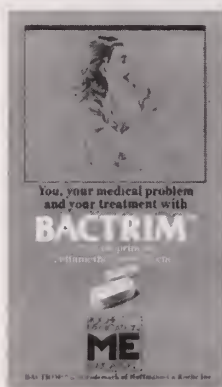
Debra M. Peterson

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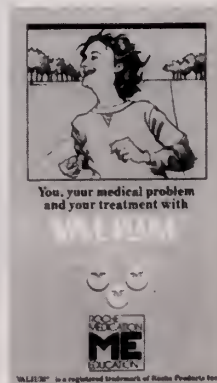
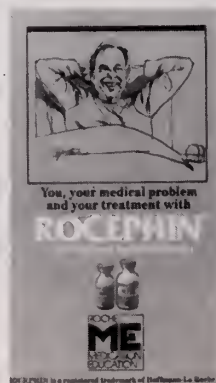
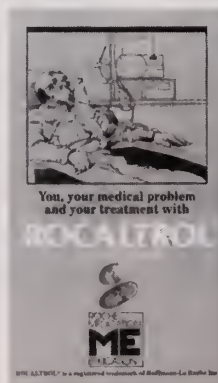
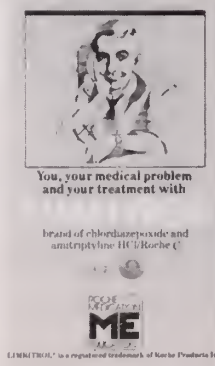
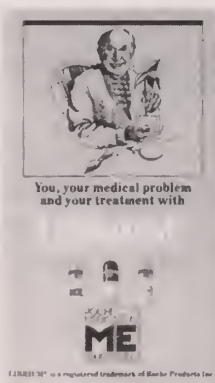
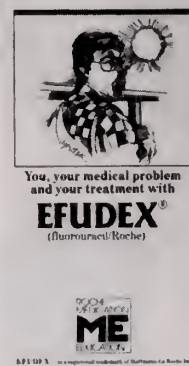
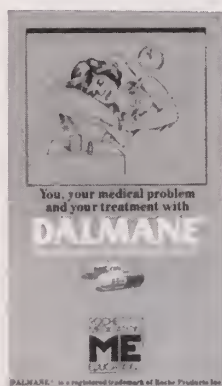


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Clinician Responsibilities Under the National Childhood Vaccine Injury Act

Diane C. Peterson

The National Childhood Vaccine Injury Act of 1986 was enacted in response to vaccine liability concerns that significantly threatened vaccine programs during the 1980s. The act established a no-fault compensation system for persons injured by vaccines and has become known as the National Vaccine Injury Compensation Program (NVICP).*

The vaccines and toxoids covered by this program include those to prevent diphtheria, tetanus, and pertussis (i.e., DTP, DT, Td, T); measles, mumps, and rubella (single antigen and combination vaccines such as MMR and MR); and polio (i.e., OPV or IPV). The events for which compensation is provided are detailed in the table;¹ other events not listed are considered case by case.

Various components of the NVICP have become operational since the law was enacted, including requirements for recording certain information in the patient's permanent medical record and reporting selected reactions. In addition, clinicians are now required to provide written statements about each vaccine to the vaccinee or to the parent or guardian. (Vaccines to prevent *Haemophilus influenzae* type B and hepatitis B are not currently governed by this act.)

Recording Information on Immunizations

One component of the act, which took effect March 22, 1988, requires all health care providers who administer one or more of the specified vaccines to record the following information in each patient's permanent medical record (or in a permanent office log or file): the date the vaccine was administered, the manufacturer and lot number of the vaccine, and the signature and title of the person administering the vaccine. The term "health care provider" is defined as any licensed health care professional, organization, or institution, whether private or

public, under whose authority a specified vaccine is administered.²

The Minnesota Department of Health has developed a "Patient Immunization History" sticker that can be affixed to the front of the patient's chart and includes space for recording the required information. In addition to assisting the provider in meeting these recording requirements, the sticker allows for a quick assessment of a patient's immunization status during office visits. The sticker can be used to record immunizations given to adults (e.g., Td, MMR, hepatitis B, and "other") although a separate "Adult Immunization History" sticker that includes space to record influenza and pneumococcal vaccina-

"The benefits of this program will be to curb rising vaccine costs and reduce product liability."

tion is available.

Reporting Reactions to Vaccines

Since March 22, 1988, the act has also required health care providers to report selected events that occur after vaccination. Initially, a two-tiered system was in place, requiring physicians to report to the Food and Drug Administration and requiring public health clinics to report to the Centers for Disease Control. Since November 1, 1990, a single system has been in place to accept these reports from both the public and private medical and health sectors. The system is known as the Vaccine Adverse Events Reporting System (VAERS) and is being administered by Evaluation Research Corporation (ERC) Bioservices of Rockville, Maryland.¹

Health care providers should complete a VAERS report form whenever they treat a patient for a possible vaccine reaction, including those listed in the table. Confirmation that the report has been received will be mailed to the physician; follow-up will be sought at 60-day and one-year post-vaccination intervals. All physicians should have received copies of the VAERS form in a mailing from ERC in 1990. Additional forms can be obtained by calling VAERS at 800/822-7967.

The Vaccine Information Pamphlets (described below) also encourage vaccinees to report to their physicians any serious problems following vaccination, or to call the above toll-free number. The materials emphasize the importance of reporting problems that occur within four weeks of vaccination.

Continued

*Since October 1, 1988, all claims for compensation of injuries related to certain specified vaccines must be filed with the U.S. Claims Court. Persons wishing to enter a claim should request General Order No. 23 from the U.S. Claims Court, 717 Madison Place NW, Washington, DC 20005; 202/633-7257.

Table

Reportable events following vaccination

Vaccine/Toxoid	Event	Interval from vaccination
DTP, P, DTP/polio combined	A. Anaphylaxis or anaphylactoid shock	24 hours
	B. Encephalopathy (or encephalitis)*	7 days
	C. Shock-collapse or hypotonic-hyporesponsive collapse*	7 days
	D. Residual seizure disorder*	(See Aids to Interpretation*)
	E. Any acute complication or sequela (including death) of above events	No limit
	F. Events in vaccinees described in manufacturer's package insert as contraindications to additional doses of vaccine** (such as convulsions)	(See package insert)
Measles, mumps, and rubella; DT, Td, tetanus toxoid	A. Anaphylaxis or anaphylactoid shock	24 hours
	B. Encephalopathy (or encephalitis)*	15 days for measles, mumps, and rubella vaccines; 7 days for DT, Td, and T toxoids
	C. Residual seizure disorder*	(See Aids to Interpretation*)
	D. Any acute complication or sequela (including death) of above events	No limit
	E. Events in vaccinees described in manufacturer's package insert as contraindications to additional doses of vaccine**	(See package insert)
Oral polio vaccine	A. Paralytic poliomyelitis	
	- in a non-immunodeficient recipient	30 days
	- in an immunodeficient recipient	6 months
	- in a vaccine-associated community case	No limit
	B. Any acute complication or sequela (including death) of above events	No limit
	C. Events in vaccinees described in manufacturer's package insert as contraindications to additional doses of vaccine**	(See package insert)
Inactivated polio vaccine	A. Anaphylaxis or anaphylactoid shock	24 hours
	B. Any acute complication or sequela (including death) of above event	No limit
	C. Events in vaccinees described in manufacturer's package insert as contraindications to additional doses of vaccine**	(See package insert)

* **Aids to Interpretation:** Shock collapse or hypotonic-hyporesponsive collapse may be evidenced by signs or symptoms such as decrease in or loss of muscle tone, paralysis (partial or complete), hemiplegia, hemiparesis, loss of color or turning pale white or blue, unresponsiveness to environmental stimuli, depression of or loss of consciousness, prolonged sleeping with difficulty arousing, or cardiovascular or respiratory arrest.

Residual seizure disorder may be considered to have occurred if no other seizure or convulsion unaccompanied by fever or accompanied by a fever of less than 102 degrees Fahrenheit occurred before the first seizure or convulsion after the administration of the vaccine involved, AND, if in the case of measles-, mumps-, or rubella-containing vaccines, the first seizure or convulsion occurred within 15 days after vaccination, OR, in the case of any other vaccine, the first seizure or convulsion occurred within three days after vaccination, AND, if two or more seizures or convulsions unaccompanied by fever or accompanied by a fever of less than 102 degrees Fahrenheit occurred within one year after vaccination.

The terms seizure and convulsion include grand mal, petit mal, absence, myoclonic, tonic-clonic, and focal motor seizures and signs. Encephalopathy means any significant acquired abnormality of, injury to, or impairment of function of the brain. Among the frequent manifestations of encephalopathy are focal and diffuse neurologic signs, increased intracranial pressure, or changes lasting at least six hours in level of consciousness, with or without convulsions. The neurologic signs and symptoms of encephalopathy may be temporary with complete recovery, or they may result in various degrees of permanent impairment. Signs and symptoms such as high-pitched and unusual screaming, persistent inconsolable crying, and bulging fontanel are compatible with an encephalopathy, but in and of themselves are not conclusive evidence of encephalopathy. Encephalopathy usually can be documented by slow wave activity on an electroencephalogram.

**The health care provider must refer to the CONTRAINDICATION section of the manufacturer's package insert for each vaccine.

Vaccine Information Pamphlets

The last component of the act to become operational is the mandated use of written statements contained in three eight-page pamphlets known as Vaccine Information Pamphlets. These pamphlets replace the "Important Information" statements that were previously required for those health care providers using vaccines distributed

"Health care providers should not
view these requirements as
potential barriers to providing
immunizations."

by the Minnesota Department of Health. Use of the pamphlets is now required of all immunization providers, who must give a new pamphlet to vaccine recipients before the administration of each vaccine, including all doses in a series.

The final written statements were published in the October 15, 1991, *Federal Register* (FR 56 51798). All immunization providers, including physicians in private practice, will be required to use these written statements beginning no later than April 15, 1992.

Each Vaccine Information Pamphlet contains a "vaccine administration record" section with space for completing information about the vaccine recipient. This section must be completed by all public and private providers using vaccines purchased through federal vaccine purchase contracts (i.e., vaccine distributed by the Minnesota Department of Health). Private providers administering privately purchased vaccines do not need to complete this section of the pamphlet. Providers choosing not to complete this section must still give the pamphlet to vaccine recipients and record the information separately in the patients' permanent medical records to meet the act's recording requirements. Providers have the option of using a multiple signature card.

The Minnesota Department of Health will provide multiple copies of the pamphlets to providers of MDH-supplied vaccine. In March the department mailed camera-ready copy to private providers of immunization services and has arranged to provide multiple copies to clinicians. The cost varies based on the quantities ordered. Pamphlets are available in packets of 50 and cost \$10 per packet for orders of one to 19, \$9 per packet for 20 to 99, and \$7.50 per packet for 100 or more plus shipping and handling charges of \$3 per order. Clinics may purchase the pamphlets by sending a check or mail order payable to MCI—Lino Lakes at the following address: VIP Order, MCI—Lino Lakes, 7525 Fourth Avenue, Lino Lakes, MN 55014.

Implementation without Creating Barriers

Health care providers should not view these three requirements as potential barriers to providing immunizations. The benefits of this program will be to curb rising vaccine costs and reduce product liability. The program should also result in better immunization records that are more routinely assessed, a more sensitive system of detecting true reactions to vaccines, and a better informed public that has more knowledge of vaccines and the diseases they prevent. Physicians may want to consider providing the Vaccine Information Pamphlets to mothers at prenatal clinics or during routine well-child visits to the doctor or clinic. The Health Department will also be encouraging hospitals to distribute these pamphlets and other immunization-related materials to mothers of newborns. Other media, such as audiotapes and videotapes, may also supplement the pamphlets.

For more information, contact the Minnesota Department of Health at 612/623-5237. MM

Diane Peterson is chief, Section of Acute Disease Programs, Minnesota Department of Health, Minneapolis, Minnesota.

REFERENCES

1. CDC. Vaccine Adverse Event Reporting System—United States. MMWR 1990;39:730-3.
2. CDC. National Childhood Vaccine Injury Act: requirements for permanent vaccination records and for reporting of selected events after vaccination. MMWR 1988;37:197-200.

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Minnesota HIV/HBV Joint Task Force Recommendations

Executive Summary

The Minnesota HIV/HBV Joint Task Force was formed in response to public concern over the potential spread of the human immunodeficiency virus and the hepatitis B virus in the health care setting. The task force included representatives from medical, nursing, and dental societies; hospital associations; and the Center for Biomedical Ethics. Representatives from the Minnesota Department of Health and the boards of dentistry and medicine provided technical assistance.

The task force's efforts resulted in the following recommendations for preventing the spread of HIV and HBV in the health care delivery system.* The task force based its recommendations on federal law and Centers for Disease Control guidelines and intended that they be used as principles to guide legislative efforts. The task force believes that legislation based on its recommendations will lead to a rational approach for managing HIV infection control in the health care setting.

Specifically, the recommendations attempt to meet the following goals:

- enhance trust in the health professions;
- continue to provide an infection-control system for the prevention of HIV transmission from infected health care workers to patients;
- enhance the current system of oversight, which is based on scientific expertise and encourages health care workers to seek treatment and counseling;
- continue to provide an efficient, cost-effective, and flexible system capable of change within the rapidly changing environment that surrounds this issue;
- enhance the current system of infection control, which provides a comprehensive and consistent method of infection control for both licensed and unlicensed health care workers; and
- continue to provide a process that protects the due process and privacy rights of health care workers and that maintains consistency with state and federal anti-discrimination laws.

*The task force recommendations are intended to strengthen current infection-control procedures for the prevention of HIV transmission from infected health care workers to patients and to help allay public fear through a rational approach for the management of HIV infection control in the health care setting. The task force initially intended to address more fully the issue of HBV transmission from health care workers to patients, but decided instead to focus primarily on HIV infection because of the greater need to develop public policy on this important issue.

SUMMARY OF TESTING COMMITTEE RECOMMENDATIONS

- Based on current data, costly and intrusive routine or mandatory testing of health care workers is not justified and is not recommended, nor should it be a requirement for employment or credentialing and licensure, nor used in professional liability insurance underwriting.
- All persons who have engaged in behaviors that place them at risk for HIV, or individuals who received blood products or blood transfusions between 1978 and 1985, should learn their HIV status.
- All health care workers are encouraged to undergo personal assessments to determine their need for HIV testing. Testing must be voluntary. These assessments should include known high-risk behaviors described in the August 14, 1987, "CDC Guidelines for Counseling and Antibody Testing to Prevent HIV Infection and AIDS," as well as risks associated with health-care-related occupational exposure.
- HIV-antibody test results of health care workers shall be maintained as private information and not disclosed to anyone other than as provided under the data privacy section of this report.
- Universal precautions must be used for all procedures. Should an inadvertent exposure occur, follow-up testing should be undertaken as recommended by the August 21, 1987, CDC guidelines.
- Currently acceptable guidelines for HBV infection control should be followed, and health care workers who are not HBV-immune should be vaccinated when appropriate.
- Health care workers should become educated about HIV risk factors, about obtaining adequate medical histories that determine HIV risk factors, and about counseling of patients who test positive for HIV.

SUMMARY OF REPORTING, RESTRICTIONS, MONITORING, AND DATA PRIVACY RECOMMENDATIONS

The following recommendations address HIV-infected health care workers only and do not address health care workers infected with HBV. Other published guidelines should be followed for the management of HBV in the health care setting.

Infection-control responsibilities of the Minnesota Department of Health

1. The joint task force recommends that the Minnesota Department of Health and an expert review panel within it be responsible for the management of HIV infection control in the health care setting. The Minnesota Department of Health's expert review panel should:
 - receive HIV-antibody test results from HIV-infected health care workers required to report;
 - investigate health care workers required to report to determine their personal health status;
 - investigate reported health care workers' practices to determine whether look-backs or practice restrictions are necessary;
 - formulate a plan of action to limit the spread of infection; and
 - implement the plan of action and monitor compliance.
2. The Minnesota Department of Health will convene an expert review panel composed of experts who represent a balanced perspective. Expert review panel members will include the following individuals:
 - the infected health care worker's personal physician;
 - an infectious disease specialist with expertise in the epidemiology of HIV transmission;
 - a health care professional who has expertise in the procedures performed by the health care worker and who has worked closely with the health care worker—preferably, this would be a person from the health care worker's place of employment who routinely has demonstrated an interest in the development of infection-control policies;
 - state and, if appropriate, local, public health officials (state public health officials should include one or two representatives from the Minnesota Department of Health);
 - a member of the infection-control committee from the health care worker's place of employment, if such a committee exists; and
 - a representative from the Minnesota Department of Human Rights.
3. The actions of the Minnesota Department of Health and the expert review panel will be undertaken in a manner that protects a health care worker's due process rights. In addition, the Minnesota Department of Health and the expert review panel will institute restrictions that are consistent with requirements of anti-discrimination laws and that provide reasonable accommodation for health care workers.

Method of oversight

1. Reporting
 - Licensed and unlicensed HIV-infected health care workers will report their HIV-reactive antibody test results to the Minnesota Department of Health consistent with Minnesota statutes.

Reporting to the Minnesota Department of

Health will be required of only those licensed and unlicensed HIV-infected health care workers whose practices pose a significant risk of HIV transmission. "Practices posing a significant risk of transmission" will be defined by the CDC or the Minnesota Department of Health using current nationally accepted infection-control standards and criteria.

If "practices posing a significant risk of transmission" are not defined by the CDC or by the Minnesota Department of Health, all HIV-infected health care workers will be required to report to the Minnesota Department of Health.

- Reporting to health care facilities by HIV-infected health care workers will occur simultaneously with reporting to the Minnesota Department of Health. It is the responsibility of the HIV-infected health care worker to review the HIV policy at his or her health care facility and to comply with the facility's reporting requirements.

2. Restrictions

- Health care workers who, through standard serologic testing, are known to carry HIV and who engage in practices that pose a significant risk of HIV transmission to patients will follow restrictions established by the Minnesota Department of Health's expert review panel. The expert review panel will use current nationally accepted infection-control standards and criteria to establish restrictions for HIV-infected health care workers.
- A health care facility's designated individual will be informed by the Department of Health's expert review panel if the panel determines that practice restrictions are necessary. Health care facilities will cooperate with the Minnesota Department of Health through development of appropriate policies and procedures for implementation of practice restrictions. The health care facility may institute its own infection-control or peer-review process prior to state action. Health care facilities' policies and procedures for implementation of practice restrictions must provide a sense of fairness and reasonable accommodation for health care workers. Reasonable accommodation will be made in compliance with anti-discrimination laws and in a manner that will allow infected health care workers to remain in a position of similar professional status in the health care facility.
- Licensed health care workers who know their HIV-infected status and fail to report to the Minnesota Department of Health consistent with Minnesota statutes will be subject to disciplinary action by their respective licensing boards.
- Licensed health care workers who have reported their HIV-infected status to the Minnesota Department of Health and then refuse to comply with restrictions established by the expert review panel will be subject to disciplinary action by their respective licensing boards.

3. Monitoring

- The expert review panel will evaluate the health care worker's practice to recommend whether patients should be notified of the potential for exposure from past practices that posed a significant risk of HIV transmission to patients, i.e., the expert review panel will recommend whether look-backs are necessary. In determining whether a look-back will be conducted, the expert review panel will consider each health care worker's practice on a case-by-case basis, taking into consideration an assessment of specific risks, confidentiality issues, and available resources. If the expert review panel determines that patient notification is necessary, only those patients who have incurred an identifiable, significant risk of HIV transmission in the health care setting will be notified in writing by the expert review panel. The expert review panel will attempt to avoid disclosing the identity of the infected health care worker.
 - The Minnesota Department of Health's expert review panel may contract with a health care facility, a professional organization, or a qualified independent consultant to monitor the HIV-infected health care worker's practices and ensure that the health care worker is complying with restrictions. The party providing monitoring services will file periodic reports with the expert review panel and will report noncompliance with practice restrictions immediately to the Minnesota Department of Health. The Minnesota Department of Health will report immediately to the appropriate licensing board any incidence of noncompliance with practice restrictions by a licensed health care worker. License restriction, suspension, revocation, or other disciplinary actions will be taken as necessary by the licensing boards in response to noncompliance with practice restrictions.
 - Legislation should be enacted authorizing the Minnesota Department of Health's expert review panel to review confidential patient medical records, health care facility infection-control documents, internal health care facility office records, and other information relevant to the health care worker's HIV-infected status.
 - Health care facilities will designate a contact person to communicate with the expert review panel and, if needed, the licensing boards.
- ### 4. Data privacy
- Health care facility information relating to the HIV-infected status of health care workers will be maintained as private information and not disclosed to anyone other than the health care worker, the health care facility's designated individual, individuals monitoring restrictions, and other people as expressly required by law. Proceedings will be private, and all data and information acquired during any proceeding will be private and will not be disclosed to anyone other than those individuals as

set forth above and as expressly required by law.

- Any legislation enacted should require the Minnesota Department of Health, the expert review panel, and the licensing boards to keep the HIV-infected status and any related information on the HIV-infected health care worker private, provided the HIV-infected health care worker is abiding by practice restrictions.
- Legislation enacted should expressly prohibit parties (except those having access to information as set forth above) to discover in civil actions or criminal prosecutions any information gathered by the health care facility of the HIV-infected health care worker, by the Minnesota Department of Health or its expert review panel, or by the licensing board, including but not limited to investigative information, recommendations, restrictions, periodic compliance reports, and records of proceedings.
- If possible under the Health Care Quality Improvement Act, legislation respecting practice restrictions should be drafted in such a way that it is not necessary to report to the National Practitioner Data Bank restrictions placed on a health care worker's practice, unless the health care worker fails to comply with practice restrictions and, as a result, the licensing board takes disciplinary action against the health care worker.

Liability

Legislation should protect the expert review panel and parties contracting with the expert review panel from civil liability for actions that are taken in good faith.

SUMMARY OF EDUCATION/LEGISLATIVE COMMITTEE RECOMMENDATIONS

1. Public education should be conducted to help the public understand HIV and HBV transmission issues as they pertain to health care workers.
2. Education of health care workers should be conducted so that they may gain a better understanding of the need for universal precautions and infection-control measures.
3. Education of public officials should be conducted to help them better understand the public policy issues that need to be addressed for limiting the transmission of HIV and HBV.

DEFINITIONS

1. **Health care facility:** a hospital, clinic, institution, office practice, nursing home, home health agency, or any place that provides health care services.
2. **HBV:** hepatitis B virus.
3. **Health care workers:** persons, including students and trainees, whose activities involve direct physical contact with patients. Such individuals include, but are not limited to, physicians, nurses, nursing assistants, dentists, dental hygienists, dental assistants, and laboratory and diagnostic technicians. Health care workers may include individuals who are employed by,

who have contracts with, or who have staff privileges at a health care facility.

4. **HIV:** human immunodeficiency virus.
5. **Private data:** data that are not public and that are accessible to the individual subject of the data.

HIV/HBV JOINT TASK FORCE REPRESENTATIVES, CHAIRS, ADVISORY MEMBERS, & STAFF

Organizational Representation

Minnesota Medical Association, Hennepin County Medical Society, Ramsey County Medical Society, Zumbro Valley Medical Society, Council of Hospital Corporations, Coalition on Nursing, Minnesota Hospital Association, Minnesota Nurses Association, Minnesota Dental Association, Health Employers Inc., Metro Hospital Trustee Association, Association for Practitioners in Infection Control, Minnesota Society of Medical Technologists, Center for Biomedical Ethics.

Task Force Chairs

Robert D. Christensen, M.D., surgeon, Park Nicollet Medical Center, Shakopee, and Dick Peterson, president and chief executive officer, Riverside Medical Center, Minneapolis.

Committee Chairs

Timothy Crimmins, M.D., chair, Reporting, Restrictions, Monitoring & Data Privacy Committee; Richard Ivance, M.D., chair, Testing Committee; J. Paul Marcoux, M.D., chair, Education/Legislation Committee.

Advisory Members*

Michael Moen, director, Division of Disease Prevention & Control, Minnesota Department of Health; Michael Osterholm, Ph.D., state epidemiologist, Minnesota Department of Health; Phillip Sheridan, D.D.S., Mayo Clinic, Minnesota Board of Dentistry; Clyde R. Olson, M.D., Duluth Clinic, and Doris Brooker, M.D., University of Minnesota, Minnesota Board of Medical Practice.

Staff

Roger Johnson and Mary Prentnieks, J.D., of the Minnesota Medical Association, and James Koppel of the Council of Hospital Corporations. For a copy of the full task force report, contact Pat Biersach at the MMA, 612/378-1875.

MM

* Advisory members participated in the discussions of the task force; however, this report does not reflect their positions on the issues addressed in this report.

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References

All references must be cited in the text and should be arranged in the order in which they are cited in the text—not alphabetically. Journals should be abbreviated as in *Index Medicus*.

Examples:

1. Benson RC Jr. Laser photodynamic therapy for bladder cancer. *Mayo Clinic Proc* 1986;61:859-64.
2. Guttormson NL, Bubrick MP. Mortality from ischemic colitis. *Dis Colon & Rectum*, to be published.
3. Chatterjee SN. Use of GOR-TEX grafts as vascular access procedure for chronic hemodialysis. Abstract of a paper submitted to the European Society for Artificial Organs Eighth Annual Meeting, Copenhagen, August, 1981.
4. Thompson NW. Thyroid and parathyroid. In: Welch KJ, Randolph JG, Ravitch MM, et al., eds. *Pediatric Surgery*, 4th ed. Chicago: Year Book Medical, 1986: vol 1, 522-33.

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The Result of an Educational Intervention for Physicians Providing HIV-Antibody Testing and Counseling

Paul Terry, Ph.D., Alfred Pheley, Ph.D., David Williams, M.D., and Scott Strickland, M.D.

ABSTRACT

Based upon our findings related to physicians' human immunodeficiency virus (HIV) antibody-testing practices in a multispecialty group practice, we randomly selected a group of family practice physicians and over six months provided them with patient education resources and information about HIV-antibody-testing guidelines and their own patient counseling practices. Following this intervention, a chart audit showed that documentation of patient counseling had doubled. We also noted positive, albeit minor, changes in obtaining informed consent. Physicians ordered fewer tests overall; however, we found a slight increase in testing for "inappropriate" reasons.

Recent events concerning physicians with acquired immunodeficiency syndrome (AIDS) and human immunodeficiency virus (HIV) antibody demonstrate the magnitude of disagreement between health professionals and the public about the need for HIV testing.¹ That mandatory testing has had a negligible public health benefit^{2,3} is a finding that appears to have eluded certain policymakers. Earvin "Magic" Johnson's announcement that he is HIV positive refocused national attention on AIDS. Debate continues about whether the primary prevention message should be "safer" sex or abstinence.

Such public debates serve to reinforce the need for improved education about HIV-antibody transmission. Physician interaction with patients requesting an HIV-antibody test can be crucial to reducing the spread of HIV.⁴ Still, little has been reported showing whether patient requests for HIV-antibody testing change physicians' efforts to counsel patients regarding safer sex or IV drug use.⁵ It remains unclear how knowledge of their serostatus influences patients' risk-reduction behaviors,⁶ but education provided by the physician has been considered critical to overcoming misinformation about AIDS.⁷

In the July 1990 issue of *Minnesota Medicine*,⁸ we reported the HIV-antibody testing practices of physicians in a Twin Cities multispecialty group practice, including the appropriateness of their reasons for testing and their education and counseling practices. In this report, we evaluate the effects of educational intervention on primary care physicians' HIV-antibody testing and counseling patterns.

Methods

In phase one of this HIV-antibody-testing study, reported in this journal in 1990, 15% of the charts we examined documented HIV education or counseling; 45% documented informed consent—with varied levels of appropriateness for ordering HIV tests.⁹ To improve these percentages, we developed a materials-based physician education campaign that consisted of four communications. We targeted as an intervention group 21 primary care physicians who had ordered six or more HIV tests. We mailed the first materials in May 1989 and the fourth set in October 1989, with five-week intervals between communications.

The first communication described the findings of phase one of our HIV-testing study. The physicians received information about their individual prevalence of documented counseling, informed consent, and appropriate test ordering. Their practice patterns were compared with the patterns of other physicians in the study sample so they could determine if they were more or less diligent about HIV counseling than the average physician. This first communication also clearly stated the intervention's objectives and advised the selected physicians to expect additional information about the importance of education for patients requesting HIV testing.

The second communication reiterated the intervention objectives and summarized highlights of the publication "HIV Blood Test Counseling: AMA Physician Guidelines."¹⁰ This 14-page publication was attached to the communication.

The third communication reminded physicians of the intervention objectives and the importance of

patient counseling in particular. We included 20 copies of a handout we had developed for the physicians to use with patients. The handout, entitled "Deciding about HIV Antibody Testing," describes HIV risk factors and offers the patient a "self-test" list of questions to consider before screening.

The final communication again reminded physicians of the intervention objectives and included a *JAMA* article⁷ about the importance of counseling and informed consent for HIV testing.

We conducted a chart audit of all physicians ordering HIV tests three months before, during, and after the intervention period. To be consistent with the findings from the phase-one audit, we excluded from the final audit physicians who had ordered fewer than six tests during the study. Also consistent with our phase-one analysis, our definition for documentation of informed consent required some evidence in the chart that testing issues were discussed and understood by the patient. Even when the patient initiated the testing, we did not assume that the request represented an "informed" decision unless deliberately noted. Similarly, patient education needed to be documented but could occur either before or after testing. We used the same definitions for appropriate and inappropriate reasons for testing in this analysis as we used in phase one.⁸ For example, we consider "appropriate" the testing of patients who have had high-risk heterosexual exposure, male patients who are gay or bisexual, or individuals who have been stuck by a potentially contaminated needle. Low-risk heterosexual practices or starting a family are "inappropriate" reasons for testing.

Results

Of the 21 physicians in the intervention group, 19 remained in the practice throughout the study period. Of these, 10 ordered fewer than 6 tests. In order to compare testing practices with phase-one results, we excluded these 10 physicians from our analysis. The remaining 9 physicians in the sample ordered 70 tests during the study period.

Table

Pre- and post-intervention documentation of patient education, informed consent, and appropriate HIV-antibody testing.

Documented evidence of:	Pre-intervention	Post-intervention
Patient education	9 of 38 (23.7%)	14 of 28 (50.0%)
Informed consent	20 of 38 (52.6%)	21 of 28 (75.0%)
Appropriate testing	9 of 42 (21.4%)	3 of 28 (10.7%)

Patient education

Adequate information was available for us to analyze documentation of patient education and informed consent for 66 of the 70 HIV-antibody tests performed during the study period. Of the 38 tests conducted before our intervention, 9 (23.7%) included documentation of informed consent (Table). Of the 28 tests conducted after our intervention, 14 (50%) included documented patient education. Thus, the proportion of documented patient education during HIV-antibody testing doubled following intervention ($p=.05$).

Informed consent

Documentation of informed consent also increased following our educational intervention. Before intervention, 20 (52.6%) of the 38 HIV-antibody tests conducted included documented informed consent. Following intervention, 21 (75%) of the 28 tests conducted included documented informed consent. Again, the change was in the right direction; however, the results failed to reach statistical significance, probably because of the small sample size.

Appropriateness of testing

The percentage of inappropriately ordered tests increased slightly, but, again, the change was not statistically significant. The proportion of appropriately ordered tests actually dropped by half, but this result is offset in part by the fact that physicians ordered only three tests for appropriate reasons during the post-test phase of this study.

Discussion

Despite the small number of physicians sampled, we believe our results support the need for continuing physician education concerning the appropriate use of HIV testing, informed consent, and patient education. When presented with current guidelines, specific information about their individual practice patterns, and useful educational resources, physicians can readily make improvements in their HIV-testing practices.¹¹ Our educational intervention consistently improved the counseling and informed consent practices of physicians in the study. Because of the small number of tests ordered for "appropriate" reasons, it is more difficult to discern intervention effects on reasons for testing. We have subjectively witnessed a more liberal attitude toward HIV testing, with physicians appearing to be more inclined to order tests for non-clinical reasons. This is somewhat corroborated by the increase in inappropriate tests ordered during the post-intervention period.

It is likely that our physician education campaign also influenced physicians in the practice who were not part of the study. Notably, when we began phase one of our study, just 15% of physicians in our multi-specialty group practice study sample were documenting HIV education; by the time we began our intervention study, 40% of the physicians in our study sample were doing so. This far exceeds figures reported elsewhere and suggests the increased attention given the issue changed the behavior of physicians throughout the practice. Studies of a

variety of physician-to-patient encounters for conditions other than AIDS have found documentation of patient counseling to be minimal.⁹ In a 1988 survey of New York City physicians, only 28% counseled patients requesting HIV testing about ways to reduce their risk for AIDS.⁶

Conclusion

Consistent communication about AIDS risk factors before and during counseling about HIV test results is one of the most effective strategies for addressing the public health threat AIDS poses. Improving physicians' patient education practices will advance these efforts. **MM**

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REFERENCES

1. Christensen RD. Testing for AIDS [Letter]. *Star Tribune* 1991 July 6:10A (col 3).
2. Cleary PD, Barry MJ, Mayer KH, Brandt AM, Gostin L, Finberg HV. Compulsory premarital screening for the human immunodeficiency virus: technical and public health considerations. *JAMA* 1987; 258: 1757-62.
3. Krasinski K, Borkowsky W, Bebernroth D, Moore T. Failure of voluntary testing for human immunodeficiency virus to identify infected parturient women in a high risk population [Letter]. *N Eng J Med* 1988; 318:185.
4. Goedert JJ. What is safe sex? Suggested standards linked to testing for human immunodeficiency virus. *N Eng J Med* 1987;316:(21):1339-42.
5. Becker MH, Joseph JG. AIDS and behavior change to reduce risk: a review. *Am J Public Health* 1988;78(4):394-410.
6. McCusker J, Stoddard AM, Mayer KH, Zapka J, Morrison C, Saltzman SP. Effects of HIV antibody test knowledge on subsequent sexual behaviors in a cohort of homosexually active men. *Am J Public Health* 1988; 78(4):462-7.
7. Sherer R. Physician use of the HIV antibody test: the need for consent, counseling, confidentiality and caution. *JAMA* 1988; 259:264-5.
8. Williams DN, Terry PE, Strickland S, Pheley

AM, Raze A. HIV antibody testing in a multispecialty group practice. *Minn Med* 1990;73(7):27-9.

9. Gemson DH, Colombotos J, Elinson J, Fordyce J, Hynes M, Stoneburner R. Acquired immunodeficiency syndrome prevention: knowledge, attitudes, and practices of primary care physicians. *Arch Intern Med* 1991;

151:1102-8

10. Rinaldi RC. HIV blood test counseling: AMA physician guidelines. *American Medical Association, AMA Division of Health Science*, 1988.

11. McClellan W. The physician and patient education: a review. *Patient Educ Couns* 1986;8:151-63.

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New OSHA Rule Governs Employees' Exposure to Bloodborne Pathogens

Mary Anne Colovic, J.D.

The Occupational Safety and Health Administration (OSHA) estimates that approximately 4.9 million health care workers have occupational exposure that puts them at risk for bloodborne diseases, including human immunodeficiency virus (HIV) and hepatitis B virus (HBV). Another half million workers in industries, including funeral services, linen services, law enforcement, fire and rescue, and corrections, are also deemed at risk. To address the sometimes fatal consequences of exposure to bloodborne pathogens, OSHA recently published its long-awaited rule designed to protect health care and other workers from occupational exposure to these pathogens. OSHA estimates that a half million establishments nationwide will be affected by its rule.

Minnesota's Response

Within weeks of the final rule's publication, the Minnesota Department of Labor and Industry, Occupational Safety and Health Division (Minnesota OSHA) proposed adopting the federal OSHA rule. By spring 1992, Minnesota OSHA will either hold a public hearing regarding adoption of the rule or will adopt the rule without a public hearing. If a public hearing is held, an administrative law judge will make recommendations to the commissioner of Minnesota OSHA about the rule's contents. The commissioner may adopt or set aside the judge's recommendations. Minnesota OSHA is simultaneously amending its existing "right to know" standards, which govern other forms of infectious materials, to ensure they are consistent with the federal rule.

Rule Scope and Coverage

Although some larger health care organizations may already be in com-

pliance with some aspects of the federal rule, such as use of universal precautions, others will have to scramble to comply with the comprehensive rule by its spring and summer 1992 effective dates.

"There is no question that the OSHA rule will be both expensive and difficult to administer."

The rule mandates detailed requirements in key areas, including exposure control, methods of compliance, communication of hazards to employees, hepatitis B vaccination, post-exposure evaluation and follow-up, and record keeping.

The OSHA rule covers all employers who have employees with occupational exposure to bloodborne pathogens. In addition to HIV and HBV, other bloodborne diseases covered by the rule include syphilis, malaria, leptospirosis, arboviral infections, relapsing fever, Creutzfeldt-Jakob disease, human T-lymphotropic virus type I, and viral hemorrhagic fever.

"Occupational exposure" is defined to mean "reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from the performance of an employee's duties."

Significantly, the rule's requirement that contact must result from

performance of an employee's duties means that "Good Samaritan" acts are not covered. For example, an employee who assists a coworker with a nosebleed but whose assigned duties do not include such assistance is not covered by the rule.

Costs of Compliance

OSHA estimates compliance costs will represent less than 1 percent of revenues for all affected industries. The largest annual costs for all industries (over \$325 million) will be for personal protective equipment such as gloves and gowns. The next highest annual cost (\$134 million) will be for training employees about the risk of occupational exposure to bloodborne pathogens. Overall, OSHA estimates annual costs in excess of \$800 million for all affected industries.

Penalties for Noncompliance

As with other types of OSHA violations, the penalties for noncompliance can be severe. Civil penalties up to \$70,000 per violation may be assessed for willful or repeated violations. Even violations that are not deemed serious or willful can result in penalties of up to \$7,000 per violation. Employers who fail to correct violations may be assessed a civil penalty of up to \$7,000 per day of continued violation. Criminal liability is also possible for willful and repeated violations.

Exposure Control

The rule requires covered employers to develop a written exposure-control plan. The purpose of the plan is to identify tasks and procedures that may lead to occupational exposure and to identify the staff positions that include tasks and procedures for which occupational exposure is rea-

sonably anticipated. Identification of tasks, procedures, and positions in which occupational exposure is reasonably anticipated must be made without regard to the use of personal protective equipment (PPE).

Although employers who already have written policies governing use of PPE or universal precautions are not expected to duplicate those policies, all requirements of the rule must be incorporated into existing policies. Employers must also explain when and how they intend to implement the rule.

Employers must review and update the plan at least annually, more often if changes in the workplace occur. For example, if an employer modifies tasks so that previously "safe" positions are now likely to lead to occupational exposure, the plan must reflect those changes.

Methods of Compliance

The rule mandates several methods of compliance in the following key areas:

Universal precautions

Use of universal precautions (assuming body fluids and materials are infectious) should be followed in all occupational exposure circumstances. Universal precautions may include hand washing, use of protective barriers and gloves, care in the use and disposal of needles and disposable instruments, and the disinfection and sterilization of reusable devices.

Engineering and work practice controls

The rule stresses implementation of engineering controls, such as hand washing, providing employees with hand washing facilities, and enforcing employees' compliance with such controls.

Engineering controls include procedures for recapping or removing contaminated sharps; for storing, caring for, and disposing of contaminated needles and sharps; for minimizing splashing and spraying of blood; and for packaging and labeling contaminated specimens, regulated wastes, or contaminated equipment. Finally, the rule also prohibits storage or consumption of

food or drink in areas where infectious materials are present.

Personal protective equipment

The greatest single cost of compliance will be providing personal protective equipment to employees with occupational exposure. PPE includes gloves, gowns, lab coats, face shields or masks, eye protection, mouthpieces, resuscitation bags, and shoe covers. Employers must provide PPE to employees at no cost.

Although the rule is not intended to require employers to provide employees with general work clothes, there may be circumstances where the rule, in practice, requires just that. If lab coats are used to prevent an employee's uniform from becoming contaminated with infectious materials, the lab coat is considered PPE and must be provided to the employee at no cost. If an item of clothing is intended to function as PPE, then it is also the employer's responsibility to clean it, repair it, replace it, and dispose of it.

OSHA emphasizes that an employee's refusal to use PPE should be handled just like any other disciplinary problem in the workplace. For example, OSHA suggests that use of PPE be a subject of the employee's performance evaluation. OSHA's bottom line is that employees should not be permitted to make individual judgments about when or what types of PPE they will use, except in emergency situations.

Use of PPE is not required in "rare and extraordinary circumstances which are unexpected and threaten the life or safety of the patient, worker, or coworker." For example, OSHA does not expect use of PPE where an apparently stable patient unexpectedly hemorrhages profusely, putting the patient's life in immediate danger. However, in any situation where there is time to consult about the need for PPE, it should be used.

The rule also outlines specific procedures to be followed when PPE is penetrated by blood or infectious materials; when health care workers leave the work area; and when employees store, wash, decontaminate, or dispose of PPE.

Housekeeping

The rule sets forth housekeeping requirements that are intended to ensure a clean and sanitary workplace. Employers must devise a written schedule for cleaning and decontaminating surfaces following contact with blood or infectious materials. Bins, pails, and other receptacles intended for reuse must be periodically inspected and decontaminated. Contaminated sharps must be discarded in puncture-resistant, leak-proof containers that are labeled and color-coded in accordance with the rule. Contaminated laundry must be bagged, transported, and handled via procedures intended to minimize the risk of needlesticks or other forms of contamination.

Hepatitis B Vaccine

Employers must provide two categories of employees with HBV vaccines, at no cost to the employee. All employees at risk of occupational exposure must be provided the vaccine within 10 working days of being assigned their position. Employees with an actual exposure incident must also be provided the vaccine. If employees refuse the vaccine, they must sign a statement to that effect, but they must have the option to change their mind and later receive the vaccine at no cost. The vaccine should be administered by a physician or by another licensed health care professional under a physician's supervision.

Post-Exposure Evaluation and Follow-up

Employers must offer post-exposure evaluation and follow-up at no cost to employees. The evaluation and follow-up should include a confidential medical evaluation documenting the circumstances of exposure, identification and testing of the source individual (with the person's informed consent), testing of the employee's blood for HBV and HIV, and evaluation of reported illnesses.

Although the rule also requires that counseling be provided to the employee at no cost, OSHA's comments to the rule suggest that such

counseling is probably not intended to go beyond merely advising the employee of his or her infection status, the results and interpretation of all tests, and the risk of infection.

A final requirement is that the employer provide the employee with "post-exposure prophylaxis." Separate Centers for Disease Control guidelines suggest that the prophylaxis include periodically retesting employees with exposure to HIV following the exposure incident.

Communication to Employees

The estimated second single largest cost of compliance will be employee training. In addition to training, communication of hazards to employees must include affixing the BIOHAZARD label on containers, equipment, and in work areas where HIV and HBV research is conducted. Facilities that use universal precautions in handling specimens or laundry need not comply with the labeling requirements.

Employers must provide required training at the time of an employee's initial assignment to tasks that might lead to occupational exposure, within 90 days after the effective date of the rule, and at least annually thereafter. Training must occur during working hours; must be in clearly understandable language; must explain modes of transmission and symptoms of bloodborne diseases; and must explain the employer's exposure-control plan, use of PPE, engineering controls, removal and handling of decontaminated PPE, the HBV vaccine, post-exposure evaluation and follow-up, and procedures to follow if exposure occurs. The training must be conducted by a knowledgeable person and must include a question-and-answer session. Additional training is required for personnel working in laboratory and production facilities.

Record Keeping

Finally, the rule requires employers to establish and maintain accurate medical records for each employee with occupational exposure. Records must include information about the

HBV vaccine and post-exposure evaluation and follow-up. Employers may not disclose the records without the employee's express written consent. Like retention periods governed by other OSHA rules, records must be kept for the duration of the employ-

"As with other types of OSHA violations, the penalties for non-compliance can be severe."

ee's employment plus 30 years.

Training records must be kept for three years from the training date and must include detailed information, including the dates of the training sessions, the contents of the session, the participants in the training, and the names and qualifications of the trainers.

Effective Dates

At the time Minnesota OSHA published its notice of proposed rule-making, it intended its rule to follow existing federal timetables, which require employers to complete exposure-control plans by May 5, 1992, and training by June 4, 1992. The remaining requirements would take effect July 6, 1992. Depending upon whether Minnesota OSHA holds hearings on its proposed rule, the effective dates may be pushed back.

Conclusion

Although the media have focused in recent months on provider-to-patient transmission, the risks of patient-to-provider transmission of HIV or HBV are far greater. The OSHA rule was designed to avoid this risk.

Although the risk of patient-to-worker transmission must certainly be addressed, there is no question that the OSHA rule will be both expensive and difficult to administer. OSHA undoubtedly did not include workers' compensation costs

within its compliance cost estimates.

Ongoing monitoring will pose even greater challenges for employers and health care providers, who must now attempt to ensure their employees' compliance with universal precautions and use of personal protective equipment.

The first step to ensuring successful compliance will be to develop a written exposure-control plan and training program that will educate employees about known risks. Providers should also designate an exposure-control "expert" to oversee compliance with the rule. This person must be knowledgeable about the rule's requirements to ensure compliance with OSHA's comprehensive regulatory scheme. **MM**

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Rural Health Care Delivery

Survival May Require an Integrated Model

Daniel K. Zisner, Ph.D., and Davis D. Fansler

Some rural health care delivery systems face a paradoxical dilemma: the medical staff is "swamped" while the community hospitals are struggling financially. Physicians, rural hospital executives, and board members frequently blame third-party payer pressures for the problem, and while an increasing disparity between services charged and dollars collected is undeniable, the problem is more complex. If rural health care delivery systems are to reverse their downward spiraling trends, a shift in the traditional health service delivery system to an integrated model must be considered.

Anatomy of the Problem

Case analyses of ailing rural health care delivery systems invariably reveal five common problems:

- a shortage of physicians, especially primary care;
- an unprofitable case mix;
- a lack of capital to fund growth or service delivery modifications;
- an underfunded physical plant and capital equipment replacement program; and
- an erosion of the patient base due to peripheral competitive pressures (e.g., "patient skimming").

Hospital and clinic administrators faced with these dilemmas frequently attribute them to uncontrollable market forces. They argue that "Physicians won't come to rural America"; "Payers don't understand our problems out here"; and "We can't compete with big systems in the city." While these factors may contribute to the difficulties confronting rural health care delivery, executives must vigorously examine the current rural health care delivery model to identify its more fundamental flaws.

Many, if not most, rural health

care delivery systems operate from the model of the community hospital and the private independent medical practice. Physicians practice solo or in small groups. Each practice may own its building, offer some lab and

"Executives must vigorously examine the current rural health care delivery model to identify its fundamental flaws."

imaging services in the office, and send referrals out of town to larger, high-tech centers. Family medicine typically dominates, although some internal medicine and general surgery may be available.

The local hospital is frequently a city or county facility with a community board, and it may or may not receive a tax subsidy. Some local hospitals are managed by outside hospital management firms or by larger health systems. Most have experienced declining admissions and a financially unfavorable case mix over the last several years. Capital to purchase profitable technology is scarce and subspecialty support to provide services locally also may be unavailable. Hospital management typically focuses its attention on a falling inpatient census while underestimating the growth potential for ambulatory services.

These issues, coupled with an aging patient base, result in over-

worked physicians with flat or decreasing incomes and hospitals with deteriorating finances that jeopardize the medical staff's viability. Prospects for growth and development are further limited as profitable health services leave town.

The rural health care delivery system's internal operations (i.e., physician and hospital services) typically include the following problems:

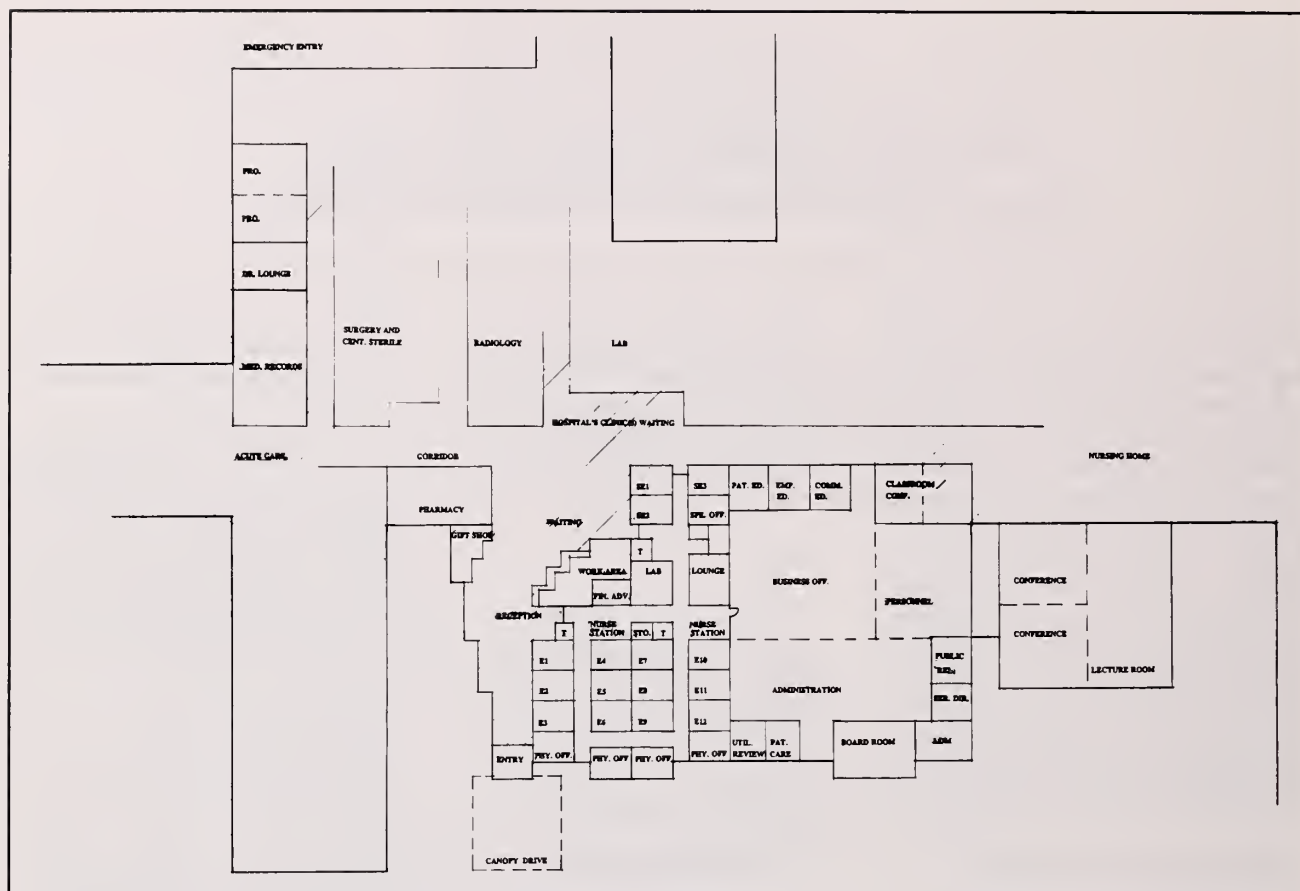
- excessive overhead;
- duplication of some ancillary services;
- an inadequate physician recruitment package, including insufficient incentives for encouraging existing physicians to risk limited working capital to bring new physicians to town;
- an unorganized approach to enhancing profitable services; and
- decreasing revenue.

Examining the Potential for a Paradigm Shift

If rural health care delivery systems are to reverse their current economic condition, a shift in the rural health service delivery paradigm will be necessary and must include a number of steps to integrate health services.

Consolidating facilities

Rural hospitals and local physician practices should consider consolidating their facilities, ideally on the hospitals' campuses. Rural hospital space configurations typically allow for several primary care physicians and visiting specialists. Physicians can often share one reception area, which may double as the scheduling and waiting area for ambulatory diagnostics and procedures. All of the physicians' ancillary services are consolidated with the hospital's, and



Sample floor plan of consolidated facilities, by Skaaden-Helmes Architects, Inc., Edina, Minnesota.

special procedure rooms are designed into the floor plan or accommodated in other areas of the hospital (see sample floor plan).

Existing medical office space is typically sold on the open market if possible, or the hospital purchases the real estate if its finances allow. Consolidation of physical space helps to reduce overhead costs and can enhance market image within the community. Overall, operating efficiency increases and costs decrease as use of physical facilities is optimized.

Reducing overhead

The clinic's business functions are consolidated with the hospital's, as are those of reception and scheduling. The hospital handles outpatient lab and imaging services, billing for physician services, accounting, and reporting functions. Computer software enhancements are usually needed since hospital information management systems do not readily meet the needs of medical practice

management. Ideally, consolidating personnel should eliminate up to .5 full-time equivalents of support staff per physician—resulting in a potential annual savings of \$100,000 or more for a medical staff of eight physicians. Hospitals, which typically pay staff at rates higher than medical clinics, must take care to adjust pay rates for clinic staff.

Integrating economics

Consolidating facilities and overhead will provide little savings unless the businesses of the hospital and physicians are economically integrated. Full economic integration requires physicians to be direct employees of the hospital, or an alternate structure that combines the hospital and physicians under a 501(c)(3) medical foundation can be used. Such structures have been successfully established in Rochester and Chisago, Minnesota, and elsewhere in the United States.

A physician-hospital organization

(PHO) structured as an integrated foundation model allows for expanded flexibility in physician compensation design. Many restrictions imposed by recent changes in federal law (e.g., Medicare fraud and abuse amendments) do not apply to bona fide employment arrangements between hospitals and physicians; safe harbors are provided. Under such arrangements, physician compensation may include recognition of laboratory and imaging production generated within the PHO. (Rules and regulations pertaining to PHO variants are complex, and experienced legal counsel should review all such arrangements.)

The table compares clinic operating statements before and after a PHO integration. Readers should note the changes in service mix, revenue, expense, and physician compensation. While the effects on the hospital operating statement are not presented here, the overall result is likely to be positive, in part because

the integration of services promotes the use of local health care services. Hospital administrators' fears that physicians will tap into traditional hospital revenues are typically unfounded since the coordinated delivery system results in a broader revenue base. The consolidation can enhance revenues and profits for all. Physician services that are typically uncompensated in the traditional fee-for-service model can be accommodated under an employment agreement with a PHO. Examples include ER services, critical care services, and call coverage.

Marketing the PHO

Appropriate marketing can help to create a positive community perception of the hospital and medical staff integration. Such marketing objectives are straightforward:

- the PHO strives to keep business "at home" to the greatest extent possible, within economic and quality of care constraints;
- alliances with secondary and tertiary care referral centers encourage the transfer of technology, services, and clinical support from the referral center to the rural provider to enhance the revenue potential of the PHO;
- community confidence in service accessibility and quality is enhanced as a coordinated effort unfolds; and
- an innovative and effective vision for rural medicine is packaged to enhance physician recruiting.

Central to effective marketing of the integration is a visible alliance with one or more respected referral centers. The benefits include service and technology transfer to the rural site from the referral center partner. As community members' confidence in the local health care system grows, they are more likely to "stay home" for care. The viability of such efforts in Minnesota has been demonstrated by the success of mobile imaging and cardiac services, cooperative cancer treatment ventures, and the more typical visiting specialist program. Mayo's recent mobile cardiac lab says it all: "Mayo Cardiology, Serving You Through Your Physicians and Community Hospital." The ru-

Table

Comparison model: independent medical practice vs. integrated delivery system

Period	Pre-PHO	%	Post-PHO	%
Average no. FTE MDs	1.00		1.00	
No. of patients/FTE MD	5,175		5,175	
Revenue				
Total production	317,250		345,000	
Production per FTE MD				
Clinic	224,250	71.42%	224,250	65.00%
Ancillary services	38,000	12.10%	69,000	20.00%
Other (hosp, ER, N/H, etc.)	51,750	16.48%	51,750	15.00%
Total	314,000	100.00%	345,000	100.00%
Adjustments	(34,950)		(38,000)	
Collected receipts	269,663	100.00%	293,250	100.00%
Average patient charge	60.68		66.67	
Operating costs				
Non-MD salaries/benefits	78,000	28.93%	65,000	22.17%
Data processing	6,400	2.37%	5,750	1.96%
Laboratory expense	8,915	3.31%	13,750	4.69%
Radiology expense	0	0.00%	5,375	1.83%
Medical/surgical supplies	8,180	3.03%	11,150	3.80%
Occupancy costs	20,000	7.42%	18,000	6.14%
Other general & admin.	35,000	12.98%	35,000	11.94%
Total operating expense	156,495	58.03%	154,025	52.52%
Income before MD comp/benefits	113,168	41.97%	139,225	47.48%
MD comp/benefits/taxes	113,168	41.97%	139,225	47.48%
Net income	0	0.00%	0	0.00%

Notes

- Scope and volume of ancillary services substantially increased.
- Staffing levels reduced .5 FTE per FTE MD.
- Other economies of consolidation were achieved in data processing and occupancy costs.

ral center takes advantage of its market position to build partnerships with referral centers that understand the need to support local health care economics. Conversely, the local primary care delivery system becomes a "value-added partner" for the referral center by helping the distant referral center to access new business efficiently.

Governance, Decision Making, and Quality Management

By definition, an integrated health care service delivery model requires one body for governance and decision making. All parties relinquish some control in an integrated model. If a nonprofit, community-based

model is the goal, the organization must exist primarily for the public good, with community members active in its decision making. For the hospital, the transition is not typically problematic. Community hospitals are experienced in public governance structures. For some physicians, an integrated service delivery system implies a loss of personal control and decision making, a concern that is only partially justified. Undoubtedly, physicians will experience greater constraints under the integrated model than they would in independent, private practice, but for most physicians, the loss of some autonomy is more than made up for by the greater long-term viability and stability of the integrated model.

An effective governance structure is one that provides reasonable representation of the principal partners—hospital, physicians, and community—together with mechanisms that efficiently balance economics and control. The governance structure should be supported by a management committee with fair physician representation. Experienced tax counsel is required to assure that resulting structures comply with the Internal Revenue Service's requirements for nonprofit organizations.

Evaluating the Prospects

An economic integration of the hospital and physician provider system should be preceded by a rigorous evaluation of the venture to assure that it begins on firm footing. Physicians contemplating an integration with a hospital should examine the opportunity in the context of the following 10 questions:

1. Is the financial position and integrity of the hospital sufficient to sustain the costs of the transition, including the working capital requirements of growth and development?

2. Is the proposed model supported by a comprehensive business plan that includes a medical staff recruitment and development plan? (All capital requirements and sources should be detailed in the plan.)

3. Are proposed changes to the facility feasible, functional, and affordable given practice styles and

program plans for growth and development?

4. Is the hospital prepared to assimilate the operations and management requirements for a medical practice, including computerization of all related business, accounting, and patient account management functions?

5. Is a referral center "partner" available and committed to program and technology development with the new organization?

6. Will the proposed governance structure allow for sufficient participation, and does it include a reasonable method for handling critical votes?

7. Are proposed methods of purchasing practice assets and real property fair?

8. Do employment agreements sufficiently and fairly address provider compensation, including the treatment of base salary guarantees, bonus potential, and ancillary service production?

9. Have related legal and tax concerns been adequately addressed and explained?

10. Has a reasonable exit strategy been provided in the event the venture fails? The physicians' ability to maintain a viable, independent practice despite venture performance should be maintained.

It is crucial that physicians vigorously pursue answers to these questions, especially those relating to the financial integrity of the new organization.

Bringing 'Stakeholders' to the Table

In many instances, physicians should take a lead role in helping the community recognize the need for a paradigm shift in rural health care delivery. The concept of the economic integration of provider systems is foreign and likely threatening to most community hospital boards. Physicians should encourage hospital executives and board members to examine hospital volume, cost, and revenue trends critically. Special consideration should be paid to historic trends in the ratio of inpatient to outpatient services, case mix evo-

lution, and out-of-area referral patterns. The effect of these trends on hospital finances is of particular importance over the long term.

These analyses should be conducted in the broader context of medical staff development and future recruiting needs. If small rural health care systems are to survive, they must keep three objectives in focus. First, they will need to compete for physicians by building an innovative and attractive economic platform from which to recruit. Second, they must avoid unnecessary duplication of services and excessive operating costs, which reduce available capital and threaten their viability. And three, rural providers must make the transition to "value-added" systems of service delivery through collaborative relationships. Rural primary care providers must take the lead in establishing partnerships with referral centers, trading their market proximity and community relationships for coordinated access to technology, service, and capital. MM

Daniel K. Zismer and Davis D. Fansler are co-founders and principals of Partners Medical Management, Ltd., a Minneapolis-based consulting firm specializing in ambulatory care service strategies and hospital-physician ventures.

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Physician Apathy Guarantees Exclusion

Thomas A. Stolee, M.D.

Recently, one of our congressmen called me to express frustration. He had been trying to get a group of physicians from his district together to discuss national health care issues, but most of the physicians he called said they were too busy but they would send their clinic manager or hospital administrator. How tragic! Our opinions are eagerly sought and valued, and we cannot afford to delegate responsibility for expressing opinions to those who may have a different agenda. Apathy only guarantees that our profession will be excluded from the decision-making process.

I have given a lot of thought to the issue of physician apathy. It has always puzzled me because physicians are generally considered assertive. While meeting with physicians from our 34 county societies, I noted that we tend to pretend there are no other people at the "health care table," although this is hardly the case. Indeed, the president, governor, Congress, state Legislature, as well as businesses, labor, insurance companies, hospital administrators, and other health care professionals, have important concerns and useful ideas. If we choose not to be involved, they will proceed without us, and they frequently have done so. These other players are rightfully somewhat resentful when patient care issues are deemed not important enough to warrant physicians' time.

Physicians appear to have four stages of reaction to government involvement in health care and other controversies: denial, anger, acceptance, and involvement. I have seen mixtures of all stages. The physicians who did not attend the county meetings characterize the denial stage. They are passive and often refer to more involved physicians as "medi-



"Apathy only guarantees that our profession will be excluded from the decision-making process."

cal politicians." They seem uninterested in their profession and often express a desire to retire early. I see these doctors in my practice, but I do not typically see them at meetings. When they do go to meetings, they say things like "socialized medicine is inevitable." This is classical self-fulfilling prophecy at its best (or worst).

The anger stage is characterized by frustration, hostility, and sometimes obstructionism. Many physicians around the state have vividly expressed their concerns to me and have occasionally attempted to "shoot the messenger." I totally understand their frustrations. I admire them for going beyond the stage of denial. Their concerns are real, and one part of my job is to help them channel their energies and take meaningful action. There is a small group, however, that refuses to hear other people, and I wonder if those physicians hear their patients.

The third stage, acceptance, is characterized by the commonly heard statement: "If we don't do something about this, the Congress (legislature, insurance company, PRO, BMP, etc.) will." This is a learning stage when physicians start relating to other groups. For most physicians, this stage is quite short since involvement with other disciplines and with fourth-stage doctors leads to early graduation.

The fourth stage is involvement, which includes leadership, creativity, and practical contribution. Physicians in this stage understand and acknowledge the deficiencies in our society's health care system. Like our president-elect, Dr. A. Stuart Hanson, they see a problem—such as smoking—resolve to do something about it, and then do it. They work closely with other people to identify a problem, develop a strategic plan, and then solve the problem. They understand that there are many sides to a question and that other opinions have validity. They understand that the problems of health care access, health care costs, domestic violence, homelessness, illegal and addictive substance use, discrimination, and other problems prevent us from providing the best health care possible.

Group behavior experts tell us that in a typical organization, 10 percent of the people are self-starters who work effectively toward a goal. Forty percent will work if asked. The next 40 percent will give their money but not their time. The last 10 percent are the "curmudgeons" whose motto is, "Play the game my way or I'll quit." I believe the Minnesota Medical Association is better than that, with a split of 20 percent, 45 percent, 34 percent, and 1 percent.

Thanks—your participation makes my job easier. MM



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People and Places Making Medical News

People

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Psychiatric Practitioner of the Year

The Minnesota Psychiatric Society honored Irving Bernstein, M.D., as its Private Practitioner of the Year for 1991. The award is bestowed on a private psychiatrist who exemplifies versatile contributions with consideration of clinical skills, teaching, scientific research, community involvement, and professional leadership.

Bernstein served on the clinical faculty at the University of Minnesota for more than 30 years and became a clinical professor emeritus in 1983. He served patients at seven metro-area hospitals and was elected chief of psychiatry at four of them. He has served in many leadership roles in Hennepin County, state, and national medical organizations, including the Hennepin County Psychiatric Society, the Minnesota Medical Alumni Association, and the Minnesota Medical Association's Mental Health and Medical Advisory committees.

AAALAC Chair

The board of trustees of the American Association for Accreditation of Laboratory Animal Care re-elected William E. Jacott, M.D., chair. Jacott, who was appointed to the board in 1988, represents the American Medical Association, a founding member of AAALAC. The AAALAC Board of Trustees comprises representatives from 36 member societies representing national professional and scientific organizations.

Jacott is assistant vice president for Health Sciences at the University of Minnesota, has been a

member of the AMA Board of Trustees since 1989, and has been an AMA delegate from the Minnesota Medical Association since 1980.

Minneapolis Children's CEO

The board of directors of Minneapolis ChildCare, Inc., has announced that Patricia H. Klauck has resigned her position as chief executive officer of Minneapolis Children's Medical Center while retaining her position as president of Minneapolis ChildCare, Inc., the medical center's parent organization.

Lawrence J. Whalen of Orono has accepted the position of chief executive officer for Minneapolis Children's Medical Center. Whalen is a member of the board of directors for Minneapolis ChildCare, Inc., and the Minneapolis Children's Medical Center. He has held executive management positions with such leading health care companies as 3M, Abbott Laboratories, and Medtronic.

APA Public Service Award

The American Psychiatric Association awarded Rep. Gloria Segal (D-St. Louis Park), an MMA auxilian, the Jacob K. Javits Public Service Award for her outstanding leadership in mental health policy. She was instrumental in passing legislation to set standards for community mental health treatment and in establishing a model mental health program for children and adolescents. She also played an active role in including nondiscriminatory coverage for major mental illnesses in health care access proposals.

Health One Residency Director

Kathleen Macken, M.D., began March 2 as director of Health One's new Family Practice Resi-

dency Program. The program will be headquartered at United Hospital with residents rotating to Children's Hospital of St. Paul, Unity Hospital in Fridley, and some rural facilities. The first class of residents is expected to start in July 1993.

Macken has been associate director of the St. Paul-Ramsey Medicine Residency program since 1986.

ASTRO Gold Medal Award

Seymour Levitt, M.D., medical director of Radiation Therapy at United Hospital, was awarded the 1991 American Society of Therapeutic Radiology and Oncology gold medal, the society's highest award.

Levitt is a specialist in the radiologic treatment of breast cancer and Hodgkin's disease and is a professor and head of Therapeutic Radiology at the University of Minnesota.

AES Vice President

Ilo E. Leppik, M.D., clinical professor of neurology and pharmacology and director of research at MINCEP Epilepsy Care, was elected second vice president of the American Epilepsy Society at its annual meeting recently. He will become president of AES in 1993.

The American Epilepsy Society promotes interdisciplinary communication, scientific investigation, and exchange of clinical information about epilepsy.

Abbott Medical Board

Abbott Northwestern Hospital's new medical board officers for 1992 are Ronald J. Peterson, M.D., president; Frazier Eales, M.D., president-elect; Robert Ganz,

M.D., secretary; Stephen Sundberg, M.D., treasurer. Immediate past president is Eugene Ollila, M.D.

Minnesota Council of HMOs Officers

The Minnesota Council of HMOs named Kirby Erickson, executive director of MedCenters, as its new chair, and Mary Brainerd, chief operating officer of Blue Plus, as chair-elect and treasurer.

Erickson, who succeeds George Halvorson as chair, has held executive management positions with several Twin Cities health care management firms, including United HealthCare and Fairview Community Hospitals. Brainerd, who served as the 1989 chair of the council, is also a senior vice president of Blue Cross and Blue Shield of Minnesota.

OPSF Scholarship Winner

The Occupational Physicians Scholarship Fund has awarded a one-year scholarship to Michael P. McGrail, M.D., M.P.H. McGrail received his M.D. from the University of Minnesota Medical School in 1985 and his M.P.H. from the University of Minnesota School of Public Health in 1981.

Scholarships of \$25,000 to \$35,000 are awarded to 12 physicians who plan to enter the field of occupational medicine. McGrail will attend Johns Hopkins University's occupational medicine residency program.

Places

Three St. Paul Schools Test for Tuberculosis

Students and staff at Highland Junior and Senior High, Como Senior High, and Battle Creek Middle School are being tested for tuberculosis after three students from the schools were found to have active cases of the disease. There is no connection between the three students with active tubercu-

losis except that they have all lived in foreign countries.

In preliminary testing, four students at Highland, one at Battle Creek, and one at Como tested positive for tuberculosis for the first time. The students were apparently infected by their classmates. Health officials decided to test everyone at the three schools to be safe.

The students have a type of tuberculosis that responds to antibiotics; they do not have the so-called "killer TB" that is resistant to drugs, said Neal Holtan, M.D., medical director for the St. Paul Health Department. Strains of this dangerous TB have struck primarily on the East and West coasts.

Nearly 100 federal health officials and private researchers who met in February proposed a list of 40 federally funded studies to help prevent, diagnose, and treat the drug-resistant strains of TB. The Centers for Disease Control earlier announced that the spread of TB is out of control and is particularly dangerous to HIV carriers.

Children's Hospital Vaccinates for Hepatitis B

Children's Hospital of St. Paul in February became the first Twin Cities hospital to vaccinate all newborns against the hepatitis B virus.

Although spread of the disease has been increasing, public health officials say they don't believe widespread vaccination is necessary throughout the state. Between 1988 and 1991, 82 percent of Minnesota's hepatitis B cases were in the metropolitan area, says State Epidemiologist Michael Osterholm. The Health Department would like to see efforts targeted at high-risk groups. Children's Hospital of St. Paul deals primarily with high-risk groups.

United Pain Center to Open in April

United Pain Center, a program developed by United Hospital and

Pain Management Concepts to help patients live with chronic pain, is scheduled to open this month. The center is located in the Doctors Professional Building on North Smith Avenue in St. Paul, across the street from the hospital's main entrance. Its multidisciplinary team will treat patients suffering from a number of painful conditions, including back injuries, arthritis, and cancer.

At the center, specialists in orthopedics, neurology, neurosurgery, physical medicine and rehabilitation, and anesthesiology will evaluate the patient's condition. When appropriate, patients will then be referred to the center's second component, a three-week session designed to help them and their family members deal with the psychological and emotional effects of pain. Aftercare sessions will also be offered to support patients who have completed the program.

In the assessment phase, medications, physical therapy, electronic nerve stimulators, and anesthesia blocks as well as surgical techniques will be considered as possible pain relievers. Patients who continue to suffer despite appropriate use of medication, manipulation, or surgery will learn to use exercise, stress management, biofeedback, and acupuncture to control their pain.

Mended Hearts Chapter Opens at Abbott Northwestern

People who are facing or have had heart surgery and their families and friends can find support in the new Minneapolis South Metro Mended Hearts Chapter 228. Meetings are held the third Tuesday of the month at 7 p.m. in the lower level of the Minneapolis Heart Institute at Abbott Northwestern Hospital, 28th and Chicago Avenue. The meetings are free and include socializing, refreshments, and a

brief presentation about current heart issues.

Mended Hearts is a nationwide support organization for individuals with heart disease, including people recovering from heart attacks or open heart surgery. Members give hope and encouragement to others by providing living proof that people with heart disease can lead full, productive lives. Members provide support by visiting heart patients in the hospital, distributing materials to members, assisting health care professionals in their work with heart disease patients and their families, and by cooperating in heart disease education and research activities. For more information, call 612/874-4444.

Park Nicollet Department Relocates

Staff at Park Nicollet Medical Center's Orthopedic Department and Hand Center announce the recent opening of their new office in the Meadowbrook office building, attached to the north side of Methodist Hospital in St. Louis Park. Seventeen physicians and therapists provide a full range of diagnostic and treatment services for a variety of musculoskeletal disorders, including athletic and work-related injuries, trauma, joint replacement, spinal disorders, and manipulation treatments used in care of spinal disorders.

Socioeconomics

Legislators, Governor Agree on Health Care Bill

DFL and IR legislators and Gov. Arne Carlson reached agreement March 9 on a health care bill designed to reform insurance practices, control skyrocketing health care costs, and give health care access to all Minnesotans.

The bill would create a \$200 million per year insurance plan, called HealthRight, for uninsured

Minnesotans. The plan would be available to residents who have been uninsured for four months and have no access to an employer health plan. The bill would encourage all state residents to have health care coverage but would not make insurance mandatory.

The MMA strongly supports the goal of providing health care access for all Minnesotans. Although the bill includes a basic set of benefits that emphasizes the importance of primary and preventive care, certain aspects of the bill concern the MMA, including the plan's funding mechanism.

Money for the plan would come from a new 5-cent increase to the cigarette tax beginning in July and a 2 percent tax on all health care providers' billings. The health care tax would be phased in, beginning with a surtax on hospital net patient revenues from inpatient, outpatient, and surgical centers beginning in 1993 and a surtax on gross revenue of all licensed health care providers beginning in 1994. The proposed tax has stirred controversy among physicians and hospitals, who believe money for the plan should come from a broad tax such as the state income tax. The tax could force some rural hospitals to close, said a spokesperson from the Minnesota Hospital Association.

Also of concern is a provision that would require health care providers who care for Medicare patients to accept the program's reimbursement rates for services to these patients. The MMA has opposed mandatory assignment for Medicare.

Watch the *MMA Monitor* for updates on the bill's progress in the Legislature and for more information on the MMA's response to the bill.

Hospitals Offer Health Access Plan

Members of the Minnesota hospital community released in February a 20-point plan to reform the state's health care delivery system,

control costs, and ensure health care access for all Minnesotans. The proposal is a joint policy statement from the Minnesota Hospital Association (MHA), which represents 158 hospitals statewide, and the Council of Hospital Corporations (CHC), which represents 28 hospitals and multi-hospital corporations in the seven-county metro area.

The plan offers specific ways to cut administrative costs, consolidate duplicative services, expand access to care, reform the private insurance market, contain rising health expenditures, and make more information available to health care purchasers, said John Frobenius, chair of MHA and president of St. Cloud Hospital, and Timothy Hanson, chair of CHC and president of St. Paul's HealthEast hospital system.

Citizens League Also Proposes Plan

The Citizens League released a report in February proposing that Minnesota create a state-sponsored health benefit plan and require every resident to have insurance. Acknowledging that a state-subsidized plan would be expensive, the report recommends that the state begin taxing employer-provided health insurance benefits and employee contributions for health premiums. The report suggests that the state expand and improve the current system whereby most Minnesotans obtain health insurance through their employers. For those who do not have employer-sponsored insurance, the report recommends the Legislature create a state-sponsored plan that would be subsidized on a sliding-fee scale based on income for those under 65 who are not eligible for Medicaid. It also recommends that health insurance be mandated.

Park Nicollet, Group Health, MedCenters Discuss Venture

Group Health, Inc., MedCenters Health Plan, and Park Nicollet Medical Center are discussing the possibility of a joint venture in response to demands from groups of employers that want higher quality, more cost-effective health plans. If negotiations succeed, the three organizations would continue to do business separately but would be partners in the new health plan. The organizations stress that discussions are preliminary.

The business coalitions include the Business Health Care Action Group (14 large corporations led by Dayton Hudson Corp.) and the Employer's Buyer Coalition. In total, the coalitions represent more than 200,000 people, spread over a broad geographic area.

Mayo's Medicare Dollars to Drop

As a result of RBRVS, Mayo Clinic will receive about \$22 million less this year for treating Medicare patients. The clinic estimates its losses will increase to an annual \$30 million by 1996.

Mayo has a high rate of complex illnesses, which the schedule does not account for, said Robert Waller, M.D., president and chief executive officer of Mayo Foundation, in a Rochester *Post-Bulletin* article. The clinic does not plan to restrict care of Medicare patients, said Waller. It plans to make up lost income by fund raising, publishing, and marketing. Mayo also might have to increase rates for patients with private insurance, even though it already charges those patients considerably more, said Waller.

Kenyon Loses Its Doctor

The struggle to provide rural health care has reached the southeastern Minnesota town of Kenyon, which is now without a town doctor. Faribault Clinic had operated the

Kenyon doctor's office through a lease agreement with Lon Krieg, M.D., the town's doctor since 1983, but patient volume became too low for Faribault to continue operating the Kenyon office.

The town is talking with District One Hospital and the Faribault Clinic to get a full-time physician in Kenyon again, said Bryan Read, the city administrator. Krieg is now looking for a position elsewhere nearby and said he does not want to practice solo again because the pressures of governmental regulations, rising costs, and being the only doctor in town are too great.

United HealthCare Achieves Record Profits

United HealthCare Corp. reported record revenue and profits for 1991. Earnings were \$74.8 million, up 121 percent over 1990, with revenue of \$847.1 million. Earnings per share nearly doubled from \$1.29 to \$2.40. United HealthCare, a national health care management company, manages Medica, Minnesota's largest HMO.

Indian Infant Mortality Remains High in Cities

Infant mortality rates for Indians are higher in urban areas than on reservations, where the federal government has concentrated its efforts, a Senate committee was told in February. Nationwide, Indian infant mortality has been reduced 80 percent since 1955 to less than 12.7 deaths per 1,000 live births, according to the Indian Health Service. But the rate in Minneapolis is 19.6, and rates in other cities are also high, according to Norine Smith, executive director of the Minneapolis Indian Health Board. Urban Indian health clinics receive just 1 percent of the Indian Health Service budget. Money goes primarily to the hospitals and clinics that IHS runs on reservations.

The American Indian Health Care Association, an organization

of urban clinics, is seeking \$10 million more next year, including \$2 for improving prenatal care. In the Twin Cities, more than four of 10 pregnant Indian women do not receive prenatal care in the first trimester, and more than 6 percent never see a doctor at all, according to the association.

Indians' Lawsuit Raises Ethical Questions

A class-action suit filed in February in South Dakota charges that the U.S. government tested the safety of an unlicensed hepatitis A vaccine on as many as 250 Indian children. The suit claims that the Indian Health Service in Aberdeen, South Dakota, told families that the vaccine was safe when the drug's safety was actually being tested. Literature given to the children's parents explained that the vaccine was being tested and encouraged parents to contact the agencies performing vaccinations if side effects developed, but it did not say safety was being tested, even though federal documents called the project a test of safety and effectiveness.

Dr. Thomas Welty, an epidemiologist with the Indian Health Service in Aberdeen, said the vaccine has been tested and licensed in several European countries and has been tested in the United States with no significant problems. "It's been tested in a large number of people, and so far there haven't been any serious side effects. So while yes, we're looking at safety, that's not the primary purpose of this trial," he is quoted as saying in a Minneapolis-based *Star Tribune* article.

The suit, which simply asks that the testing be stopped, was filed by reservation members, the Native Resource Coalition, and Advocates for Human and Civil Rights.

Medical Research

Acyclovir for Chickenpox

The U.S. Food and Drug Administration approved in February use of the antiherpes drug acyclovir for treating chickenpox. University of Minnesota pediatrics professor Henry Balfour, M.D., and other researchers conducted trials of the drug that led to FDA approval.

Dosage to treat chickenpox typically costs about \$40, but can vary. Studies show that the drug speeds recovery when given during the first 24 hours after the chickenpox rash appears. Researchers at the University of Minnesota and Park Nicollet Medical Center are planning a new study to investigate what happens when acyclovir is given 48 to 72 hours after the rash appears.

AIDS Update

AZT Research

Using AZT early in the course of infection delays development of AIDS but does not increase life span any more than starting the drug after symptoms worsen, according to a national study published in the February 13 *New England Journal of Medicine*. The results may alter earlier recommendations that all HIV-infected individuals receive AZT as soon as significant immune system problems occur. The study also found that patients who received early AZT therapy tend to be sicker once they develop AIDS.

Another study suggests that AZT may prevent the spread of HIV from mothers to fetuses. Fourteen pregnant women at the University of Washington and Children's Hospital of Seattle received AZT treatment to prevent spread of HIV to their unborn babies, and, although it is uncertain whether AZT is the reason, none of the babies contracted the virus, even though they faced at least a 1-in-4 chance of infection. The Seattle project is one of nine across the nation.

Students Ignore AIDS Risk

High school students are aware of AIDS and its dangers but are doing little to avoid contracting the disease, suggests a recent survey.

Nearly all of the 1,150 high school seniors who responded to

the survey said they know how AIDS is contracted, but of the 28 percent who said they are sexually active, 42 percent said they would have sexual intercourse even if a condom was not available. **MM**



K. James Ehlen, M.D.
Chairman, CEO Medica

MEDICA IS PEOPLE NOT PRODUCTS

Last month I described Ambulatory Care Evaluation (ACE), a new and innovative approach to measuring quality of patient care that we believe is fair and credible and will pay off in real quality improvement.

Physician participation is key to the success of this and all our quality assurance programs. At Medica, physician involvement works through the Medical Policy Council and the Quality Assurance Committee.

Physician participation distinguishes Medica from traditional health plans that just sell benefit packages. We manage care in collaboration with our network of participating physicians and facilities.

That's why it's important for Medica to measure the quality of process in the treatment of plan members. Although we don't produce "report cards" on individual physicians, we will assure purchasers of Medica policies that our network of independent practitioners and capitated clinics is providing necessary and effective medical care.

Concerns also spring from widespread interest in reform of the whole health care system. Medica is striving to be an effective conduit for health care providers to meet the public's interests, expectations and demands for quality, cost-effective health services.

This effort will require communication: among physicians, between physicians and Medica and from Medica to various public constituencies with a vital interest in health care.

Working together, we believe we can make a difference.

next month: to maintain network quality we will be working with participating physicians to turn practice guidelines into more formal standards for credentialing new and current members of the network.

MEDICA

A Calendar of Continuing Medical Education Courses

Provided through the MMA Medical Education Subcommittee on CME Resources. For assistance with scheduling meetings or for information on future medical meetings and CME courses, please contact the MMA office: 2221 University Avenue SE, Suite 400, Minneapolis, Minnesota 55414; 612/378-1875. Information for each entry is arranged by date; name of program; primary sponsor; location; contact person.

A P R I L 1 9 9 2

April 6 Bloodborne Pathogen Exposure in the Workplace Midwest Center for Occupational Health and Safety, St. Paul-Ramsey Medical Center, University of Minnesota School of Public Health, National Institute for Occupational Safety and Health; Hilton Hotel Metrodome, Minneapolis, MN. CONTACT: Susan Larson, Education Coordinator, or Christine Western, Program Assistant, Midwest Center for Occupational Health and Safety, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

April 6-7 Annual Ophthalmology Course Office of CME, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of CME, Radisson Hotel Metrodome, Suite 107, 615 Washington Avenue SE, Minneapolis, MN 55414; 612/626-7600.

April 6-10 Team Management of Diabetes Mellitus International Diabetes Center; International Diabetes Center, Minneapolis, MN. CONTACT: Cindy Poppitz, International Diabetes Center, 5000 West 39th Street, Minneapolis, MN 55416; 612/927-3393.

April 8-10 Annual Spring Refresher—Minnesota Academy of Family Physicians Minnesota Academy of Family Physicians; Hyatt Regency Hotel, Minneapolis, MN. CONTACT: Virginia Barzan, Minnesota Academy of Family Physicians, 2221 University Avenue SE, Minneapolis, MN 55414; 612/331-2506.

April 10-11 Advanced Laparoscopic Abdominal Surgery Seminar Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

April 10-11 Pelviscopic Surgery Including Laparoscopic Hysterectomy Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Laser Center 39102, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-3000.

April 11 Treatment of Renal and Ureteral Stones in the '90s Minnesota Urological Society; St. Paul Hotel, St. Paul, MN. CONTACT: Jennifer Syltie, Minnesota Medical Association, 2221 University Avenue SE, Suite 400, Minneapolis, MN 55414; 612/378-1875 or 800/999-1875.

April 14 Minnesota Regional Sleep Disorders Center Annual Dinner Lecture Hennepin County Medical Center; Minneapolis Athletic Club, Minneapolis, MN. CONTACT: Celia Poehls, 701 Park Avenue, MC 867A, Minneapolis, MN 55415-1829; 612/347-2079.

April 16 Spondyloarthropathies Group Health, Inc.; Minneapolis Metrodome Hilton, Minneapolis, MN. CONTACT: Debbie Bladine, Group Health, Inc., 2829 University Avenue SE, Minneapolis, MN 55414; 612/623-8479.

April 20-24 Team Management of Diabetes Mellitus International Diabetes Center; International Diabetes Center, Minneapolis, MN. CONTACT: Cindy Poppitz, International Diabetes Center, 5000 West 39th Street, Minneapolis, MN 55416; 612/927-3393.

April 23-25 17th Annual Spring Continuing Education Seminar Minnesota Academy of Physician Assistants; Northwest Inn, Brooklyn Park, MN. CONTACT: Robert Bendickson, R.R.3, Box 126A, Stanchfield, MN 55080; 612/689-1411 (days), or 612/396-4296 (evenings).

April 24 Annual Practical GI Conference Primary Care Hennepin County Medical Center; Hennepin County Medical Center, Minneapolis, MN. CONTACT: Laura Carroll, 701 Park Avenue, MC 867A, Minneapolis, MN 55415-1829; 612/347-2078.

April 24 Breast Cancer: Issues in Prevention and Cure Abbott Northwestern Hospital, University of Minnesota School of Public Health, Minnesota Department of Health; Minneapolis Convention Center, Minneapolis, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

April 24-25 Lasers in Orthopedic Surgery Laser Center of Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Laser Center 39102, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-3000.

April 24-25 15th Annual Update in Clinical Cardiology Abbott Northwestern Hospital; Location to be determined. CONTACT: Minneapolis Heart Institute Foundation, 920 East 28th Street, Minneapolis, MN 55407; 612/863-3979.

April 24-25 Sexual Attitude Reassessment Seminars (SAR) Program in Human Sexuality; Holiday Inn Metrodome, Minneapolis, MN. CONTACT: SAR Coordinator or Secretary, Program in Human Sexuality, FMC Building, 1300 South 2nd Street, Minneapolis, MN 55454; 612/625-1500.

April 24-26 First Annual Mayo Clinic Conference on Advances in Clinical Anesthesiology Mayo Clinic/Mayo Foundation; Amelia Island Plantation, Amelia Island, FL. CONTACT: Postgraduate Courses, Mayo Clinic/Mayo Foundation, 200 1st Street SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

April 27-28 **Contact Laser Laparoscopy Cholecystectomy Course** Hennepin County Medical Society; Hennepin County Medical Society, Minneapolis, MN. CONTACT: Robin Hoppenrath, 701 Park Avenue, MC 867A, Minneapolis, MN 55415-1829; 612/337-7128.

April 27-29 **Bone & Soft Tissue Tumors** Mayo Clinic/Mayo Foundation; Hilton Beach & Tennis Resort, San Diego, CA. CONTACT: Postgraduate Courses, Mayo Clinic/Mayo Foundation, 200 1st Street SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

April 29 **Orthopedic Challenges in Rheumatology** Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

MAY 1992

May 1-2 **Advanced Laparoscopic Abdominal Surgery Seminar** Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

May 2 **Interventional Radiology** Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

May 2 **1992 Perinatal/Neonatal Update** Abbott Northwestern Hospital and Minneapolis Children's Medical Center; Madden's on Gull Lake, Brainerd, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

May 4-8 **Family Practice Review and Update** Office of CME, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of CME, Radisson Hotel Metrodome, Suite 107, 615 Washington Avenue SE, Minneapolis, MN 55414; 612/626-7600.

May 11-15 **Practice of Internal Medicine** Mayo Clinic/Mayo Foundation; Mayo Foundation, Rochester, MN. CONTACT: Rita Kunz or Jan Fleck, Mayo Clinic/Mayo Foundation, Section of CME, 200 1st Street SW, Rochester, MN 55905.

May 12 **Gynecology and Gynecologic Oncology** Office of CME, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of CME, Radisson Hotel Metrodome, Suite 107, 615 Washington Avenue SE, Minneapolis, MN 55414; 612/626-7600.

May 12-14 **On the Cutting Edge: Etiology to Current Management of Diabetes** International Diabetes Center; International Diabetes Center, Minneapolis, MN. CONTACT: Cindy Poppitz, International Diabetes Center, 5000 West

CONTINUING MEDICAL EDUCATION

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15th Annual Update in Clinical Cardiology

presented by the Minneapolis Heart Institute Foundation
April 24-25 ■ Minneapolis

Orthopaedic Challenges in Rheumatology

presented by the Arthritis Care Program
April 29 ■ Minneapolis

1992 Perinatal/Neonatal Update

presented by The Perinatal Center of Abbott Northwestern Hospital and Minneapolis Children's Medical Center
May 2 ■ Madden's Resort, Brainerd

Thrombolytic Therapy in Acute MI

presented by the Minneapolis Heart Institute Foundation
September 18, November 6 ■ Minneapolis

Interventional Radiology, Surgery, and Medicine: New Perspectives for the Primary Care Physician

presented by Consulting Radiologists, Ltd. and the Minneapolis Heart Institute Foundation ■ September 26 ■ Minneapolis

Lyme Disease Seminar

presented by the Lyme Disease Coalition of Minnesota
October 23 ■ Minneapolis

Front Line Neurology: Primary Care Management of Patients with Neurological Problems

presented by the Minneapolis Neuroscience Institute
November 6-7 ■ Minneapolis

The following "Hands-on" seminars are presented by the Laser Center of Abbott Northwestern Hospital.

Advanced Laparoscopic Abdominal Surgery

May 1-2, June 12-13, September 18-19,
October 2-3 ■ Minneapolis

Cutaneous Laser Surgery

October 30-31 ■ Minneapolis

Lasers in Orthopaedic Surgery

April 24-25, May 29-30, September 11-12,
November 13-14 ■ Minneapolis

Pelvic Surgery Including Laparoscopic Hysterectomy

June 19-20, October 23-24 ■ Minneapolis

For more information, contact the

CME Office, Department 14202
Abbott Northwestern Hospital
800 East 28th Street
Minneapolis, MN 55407-3799
(612) 863-5461

Health One Medical Education

April 7

NEWER ANTIBIOTIC TRENDS

Presented by Al Heaton, Pharm.D
(via Educational Telephone Network)
12:00 p.m. - 1:00 p.m.

April 21

NEW PROPOSALS FOR HEALTH CARE REFORM

Presented by Steven Miles, MD
(via Educational Telephone Network)
12:00 p.m. - 1:00 p.m.

April 27 & 28

ADVANCED TRAUMA LIFE SUPPORT (ATLS™)

United Hospital of St. Paul
7:30 a.m. - 5:00 p.m.

May 11

EMERGENCY MEDICINE FOR NURSES/PARAMEDICS

Earle Brown Heritage Center
Brooklyn Center, MN
7:00 a.m. - 4:30 p.m.

May 22 & 23

ADVANCED LIFE SUPPORT IN OBSTETRICS (ALSO)

Earle Brown Heritage Center
Brooklyn Center, MN
7:30 a.m. - 5:30 p.m.

Health One
Medical Affairs Division

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39th Street, Minneapolis, MN 55416; 612/927-3393.

May 13 **Thrombolytic Therapy in Acute MI** Abbott Northwestern Hospital; Minneapolis Heart Institute, Minneapolis, MN. CONTACT: Minneapolis Heart Institute Foundation, 920 East 28th Street, Minneapolis, MN 55407; 612/863-3979.

May 13-15 **Current Concepts in Radiation Therapy** Office of CME, University of Minnesota Medical School; Mayo Memorial Auditorium, U of M, Minneapolis, MN. CONTACT: Becky Noren, Office of CME, Radisson Hotel Metrodome, Suite 107, 615 Washington Avenue SE, Minneapolis, MN 55414; 612/626-7600.

May 14-16 **Acupuncture for Pain Control** Hennepin County Medical Center; Hennepin County Medical Center, Minneapolis, MN. CONTACT: Laura Carroll, 701 Park Avenue, MC 867A, Minneapolis, MN 55415-1829; 612/347-2078.

May 18-22 **Team Management of Diabetes Mellitus** International Diabetes Center; International Diabetes Center, Minneapolis, MN. CONTACT: Cindy Poppitz, International Diabetes Center, 5000 West 39th Street, Minneapolis, MN 55416; 612/927-3393.

May 21 **Adult Survivors of Sexual Abuse in Childhood** Group Health, Inc.; Minneapolis Metrodome Hilton, Minneapolis, MN. CONTACT: Debbie Bladine, Group Health, Inc., 2829 University Avenue SE, Minneapolis, MN 55414; 612/623-8479.

May 21-22 **Primary Care Treatment for Pressure Sores** Hennepin County Medical Center; Hennepin County Medical Center, Minneapolis, MN. CONTACT: Ann Samways, 701 Park Avenue, MC 8A, Minneapolis, MN 55415-1829; 612/347-2075.

May 29-30 **Lasers in Orthopedic Surgery** Laser Center of Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Laser Center 39102, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-3000.

JUNE 1992

June 5-6 **Clinical Hypnosis Workshops: Advanced and Introductory** Office of CME, University of Minnesota Medical School; Sheraton Midway Hotel, St. Paul, MN. CONTACT: Becky Noren, Office of CME, Radisson Hotel Metrodome, Suite 107, 615 Washington Avenue SE, Minneapolis, MN 55414; 612/626-7600.

June 11-25 **Scandinavia/Russia Air/Sea Cruise** INTRAV; Denmark, Russia, Finland, Sweden, Poland, Norway, Holland. CONTACT: North Central Medical Conference, 1845 Hampshire Avenue, #200, St. Paul, MN 55116; 612/698-1888.

June 12-13 **Advanced Laparoscopic Abdominal Surgery Seminar** Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, Minneapolis, MN 55407; 612/863-5461.

June 17-19 **56th Annual Course Progress in Vascular Surgery** Department of Surgery, University of Minnesota Medical School; Willey Hall, University of Minnesota, Minneapolis, MN. CONTACT: Office of CME, Radisson Hotel Metrodome, Suite 107, 615 Washington Avenue SE, Minneapolis, MN 55414; 612/626-7600.

June 18 **Immunizations: New Directions and Controversies** Group Health, Inc.; Minneapolis Metrodome Hilton, Minneapolis, MN. CONTACT: Debbie Bladine, Group Health, Inc., 2829 University Avenue SE, Minneapolis, MN 55414; 612/623-8479.

June 20-July 2 **Midnight Sun Express & Alaska Passage** INTRAV; Fairbanks/Anchorage, Alaska. CONTACT: North Central Medical Conference, 1845 Hampshire Avenue, #200, St. Paul, MN 55116; 612/698-1888.

June 26-27 **Sexual Attitude Reassessment Seminars (SAR)** Program in Human Sexuality, Holiday Inn Metrodome, Minneapolis, MN. CONTACT: SAR Coordinator or Secretary, Program in Human Sexuality, FMC Building, 1300 South Second Street, Minneapolis, MN 55454; 612/625-1500.

AUGUST 1992

Aug. 20-22 **Operative Gynecology: Third Annual Live Televideo Conference** Mayo Clinic/Mayo Foundation; Mayo Foundation; Rochester, MN. CONTACT: Postgraduate Courses, Mayo Clinic/Mayo Foundation, 200 1st Street SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

SEPTEMBER 1992

Sept. 5 **Pediatric Emergency Medicine Conference—Topics in Pediatric Emergency Medicine** Minneapolis Children's Medical Center; Education Building, Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Kathy Ingerson, MCMC, 2525 Chicago Avenue South, Minneapolis, MN 55404; 612/863-5884.

Sept. 6-7 **Pediatric Emergency Medicine Conference—Pediatric Advanced Life Support (PALS)** Minneapolis Children's Medical Center; Education Building, Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Kathy Ingerson, MCMC, 2525 Chicago Avenue South, Minneapolis, MN 55404; 612/863-5884.

Sept. 11-12 **Lasers in Orthopedic Surgery** Laser Center of Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Laser Center 39102, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-3000.

Sept. 18 **Thrombolytic Therapy in Acute MI** Abbott Northwestern Hospital; Minneapolis Heart Institute, Minneapolis, MN. CONTACT: Minneapolis Heart Institute Foundation, 920 East 28th Street, Minneapolis, MN 55407; 612/863-3979.

Sept. 18-19 **Advanced Laparoscopic Abdominal Surgery Seminar** Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

OCTOBER 1992

Oct. 2-3 **Advanced Laparoscopic Abdominal Surgery Seminar** Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

Oct. 23-24 **Pelviscopic Surgery Including Laparoscopic Hysterectomy** Laser Center of Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Laser Center 39102, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-3000.

NOVEMBER 1992

Nov. 6 **Thrombolytic Therapy in Acute MI** Abbott Northwestern Hospital; Minneapolis Heart Institute, Minneapolis, MN. CONTACT: Minneapolis Heart Institute Foundation, 920 East 28th Street, Minneapolis, MN 55407; 612/863-3979.

Associate Physician Negotiable Salary!

Hennepin County's Pilot City Health Center is seeking the services of a part-time to full-time BC/BE Family Practitioner or Internist.

Pilot City Health Center is a community based, ambulatory, primary health clinic located in the City of Minneapolis. Established in 1968, we provide high quality health care to families in the Near North and Camden neighborhoods.

To inquire or apply, please call (612) 347-2277 or send VITA to the Personnel Department, Hennepin County Bureau of Health, 701 Park Avenue South, Minneapolis, MN 55415. VITAS are accepted until further notice.

Pilot City Health Center



*Hennepin County Bureau of Health
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Physician Opportunities and Miscellaneous Listings

Classified rates are \$1.00 a word. Minimum monthly charge is \$35; with box number \$5 additional. Ads will not be accepted by phone.

- Placement of ads must be made six weeks before the date of publication (e.g., April 15 for June ad). Please send ad requests to *Minnesota Medicine*, 2221 University Avenue SE, Suite 400, Minneapolis, Minnesota 55414.
- The publisher reserves the right to decline or withdraw advertisements. The publisher is not responsible for clerical or typographical errors and is not permitted to divulge the identity of advertisers who have replies sent to box numbers.
- Cancellation of ads must be made by the first of the month preceding month of issue.

Johnson & Falls Search Associates is changing its name. Our success has created growth, and growth creates change. Our office has moved, and we have changed our name to **HEALTHCARE RESOURCE GROUP**. As the new name indicates, we offer a broader range of recruitment services not only locally, but nationally, through affiliates with offices in eastern and western states. With **Healthcare Resource Group**, you will have the ability to compare your current practice with practice opportunities nationally. Your search will be held in strictest confidence, and services will continue to be provided at no fee to candidates. For thorough assistance in expanding your professional options, please send CV or call Liz Johnson, Healthcare Resource Group, 9072 Preserve Blvd., Eden Prairie, MN 55347; 612/828-6890. (4/92-R)

Bemidji, Minnesota: Excellent opportunities for well-trained physicians. We are seeking BC/BE physicians in family practice and otolaryngology to join a young 33-physician multispecialty group practice located in northern Minnesota. Competitive salary guarantee plus incentive first year and excellent benefits. An excellent opportunity for a physician to enjoy practice in the center of hunting, fishing, and clear air. Please respond with CV to: C.C. Lowery, Administrator, Bemidji Clinic-MeritCare, 1233 34th Street NW, Bemidji, MN 56601; 218/751-1280. (R)

Internist to join a progressive 13-physician group practice. Rural college town 30 miles from St. Paul, Minnesota. New clinic and constructing new hospital. Contact: Robert B. Johnson, M.D., River Falls, WI 54022; 715/425-6701. (*9/91-R)

Urgent Care/Primary Care physicians for over 90 group positions in metropolitan Phoenix/Tucson, Arizona. Excellent compensation/partnership opportunities. Other quality positions nationwide. Send CV or call: Mitch Young (MM), PO Box 1804, Scottsdale, AZ 85252; 602/990-8080. (*1/90-R)

Family Practitioner to join a progressive 13-physician group practice. Rural college town 30 miles from St. Paul, Minnesota. New clinic and constructing new hospital. Contact: Robert B. Johnson, M.D., River Falls, WI 54022; 715/425-6701. (*9/91-R)

Mankato: FP partner to join four board-certified family physicians, ages 34-43, in fast-growing, full-range practice. Ob optional. Population 40,000+. Seventy miles to Twin Cities. Four colleges nearby. Subspecialty consultation readily available on hospital staff. Academic appointment available. Call: Tony Giefer, M.D., 507/387-8231. (8/91-R)

Family Physicians: Well-established south suburban Minneapolis family practice group seeks associates part/full time to staff day clinic. Excellent call schedule, salary, and fringe benefits. Also seeking locum tenens to staff PT/FT Urgent Care Centers and/or day clinic. Contact: Administration, Family Physicians, P.A., 612/435-4125, or send inquiries to Suite 100, 14050 Nicollet Avenue South, Burnsville, MN 55337. (*9/89-R)

Mankato Clinic, Ltd. is seeking BC/BE physicians in the following specialties: invasive cardiology, oncology/hematology, pulmonary medicine, general surgery, gastroenterology, family practice, and general internal medicine. The Mankato Clinic is a 53-physician multispecialty group practice in south-central Minnesota with a trade-area population of +250,000. Guaranteed salary first year, incentive thereafter with full range of benefits and liberal time off. For more information call: Dr. B. C. McGregor, President, or Roger Greenwald, Executive Vice President, 507/625-1811 or write: 501 Holly Lane, Mankato, MN 56001. (12/91-R)

BC/BE Orthopedic Surgeon and BC/BE Family Practice, Internal Medicine, and Ob/Gyn Physician: Excellent opportunity to join well-established, progressive, 20-physician multispecialty group located in an economically sound community of 20,000 (drawing area of 40,000), 65 miles south of the Twin Cities. Full membership after one year. Competitive salary and fringe benefits package. Contact: Ed Durst, M.D., or Terry Tone, Administrator, 134 Southview, Owatonna, MN 55060; 507/451-1120. (2/92-R)

Forest Lake Doctor's Clinic is seeking a BC/BE family physician, pediatrician, ob/gyn, and internist to join 10-physician multispecialty group. Located 25 miles north of Minneapolis-St. Paul in progressive community with excellent schools, many beautiful lakes, recreational activities, golf, fishing, boating, skiing. Local hospital directly across street. Contact: Dr. Harvey J. Frank or Dr. Doug Sill, 121 SE 11th Avenue, Forest Lake, MN 55025; 612/464-7100. (4/90-R)

MDsearch assists medical groups and hospitals in their recruiting efforts. For confidential information on opportunities in the Upper Midwest, send CV and/or call collect: Mary Jo Cordes, MDsearch, PO Box 21507, St. Paul, MN 55121; 612/454-7291. (12/91-R)

Lake City, Minnesota: Family physician BC/BE needed to join three other FPs in progressive, growing practice on Lake Pepin/Mississippi River in southeastern Minnesota. Excellent first-year salary/benefits in a scenic community with multiple recreational opportunities. Contact: D.D. Pflaum, M.D., 303 South Washington, Lake City, MN; 612/345-3318. (8/90-R)

Olmsted Medical Group is seeking BC/BE physicians in the following specialties: orthopedics, radiology, family practice, emergency medicine, and ob/gyn. Great opportunity for well-trained physicians to join a 55+ physician multispecialty group in a dynamic, progressive practice. In addition to the main office in Rochester, the group operates eight branch offices in southeastern Minnesota. Excellent salary/benefits package includes malpractice insurance, flexible benefits plan, 401(k) and profit sharing, and relocation assistance. Send CV to: Olmsted Medical Group, Attn: Susan Schuett, 210 Ninth Street SE, Rochester, MN 55904. (1/92-R)

Downtown Office Space for Rent: Physician in the Medical Arts Building, 825, wishes to sublet to another physician on a part-time basis for the purpose of sharing overhead expenses. Call: 612/370-0553. (6/90-R)

Wisconsin: 120-physician multispecialty clinic in the Fox River Valley of northeastern Wisconsin desires two BC/BE pediatricians to join department of 15 BC/BE pediatricians. Excellent compensation and benefits package, leading to shareholder status after two years. The community offers a superb recreational, cultural, and family environment in which to practice. For information please call or write: Howard Kidd, M.D., La Salle Clinic, 411 Lincoln Street, Neenah, WI 54956; 414/727-4276. (3/91-R)

Family Physician wanted to join three board-certified M.D.s in well-established, expanding group practice. Weekend ER coverage. No buy-in. Financial package hard to beat. Enjoy a progressive, rural city within easy reach of St. Cloud and Minneapolis. Contact: Dr. Jim Mohs, Melrose Clinic, 603 West Main Street, Melrose, MN 56352; office, 612/256-4228; home, 612/256-3488. (4/91-R)

Internal Medicine, Pediatrics, and Dermatology practice opportunities available at the Faribault Clinic. The Faribault Clinic is a multispecialty group practice of 19 physicians. Faribault is located 50 miles south of Minneapolis on I-35. For more information contact: Ray W. Wood, M.D., or Ken Smith, Administrator, 924 NE First Street, Faribault, MN 55021; 507/334-3921. (4/90-R)

Stillwater: Multispecialty group with emphasis on primary care seeking BC/BE family physician, pediatrician, and

MEDICAL ORTHOPAEDIST

General Orthopaedic practice with emphasis on adult reconstructive surgery, sports medicine, and trauma, seeks *Medical Orthopaedist* for office-only work. No call. Competitive salary and benefit package.

Resort community with abundance of winter and summer recreational outlets.

Send CV to: Terence J. Kennedy, M.D., 1500 Irving St., Alexandria, MN 56308 or call 1-800-762-1177.

Oxboro Clinics, a large, progressive, multi-specialty practice with offices in **Bloomington** and **Burnsville**, offers outstanding physician opportunities.

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Jennifer J. Mitchell
Fairview Physician & Clinic Services
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Bloomington, MN 55420
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or toll free 1-800-842-6469



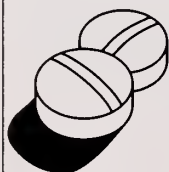
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internist. Scenic location with excellent school system, supportive medical community with strong local hospital, competitive salary and benefits. Send CV to: Jon Petersen, St. Croix Valley Clinic, 921 Greeley, Stillwater, MN 55082; 612/439-2215. (12/92-R)

Family Physician wanted to join five-physician, two-P.A., two-site family practice group in St. Anthony and Shoreview. Ob available. Competitive salary, benefits package, and call schedule. Contact: Gerald Pitzl, M.D., Silver Lake Clinic PA, 612/788-9251. (7/91-R)

General Surgeon: Five-man family practice group seeks surgeon. Only clinic in city of 8,000, one hour from Minneapolis. Position should generate adequate salary and lots of family time. Write: Minnesota Medicine (853), 2221 University Avenue SE, Suite 400, Minneapolis, MN 55414. (8/91-R)

Wadena, Minnesota: Beautiful central Minnesota is home to the Wadena Medical Center, a five-physician group, and Tri-County Hospital. A scenic three-hour drive from Minneapolis. Family physicians to do obstetrics. Contact Dr. Matt Yelle, 218/631-1360, or Jim Lawson, Administrator, 218/631-3510. You'll not want to pass up this attractive place and offer. (8/91-R)

Pediatrician wanted to join group of five board-certified pediatricians in a well-established, progressive group practice. Located in Minneapolis, minutes away from Children's Medical Center. Small practice stressing patient care and preventive medicine. Contact: Gregg Savitt, M.D., 3145 Hennepin Avenue, Minneapolis, MN 55408. (9/91-R)

Family Physician/Internist: Regional treatment center interested in two full-time, BC/BE family practitioners/internists. Forty hours/week. Competitive salary and benefits. Live in the exciting Brainerd lakes area. Send CV to: Chief of Medicine, Brainerd Regional Human Services Center, 1777 Highway 18 East, Brainerd, MN 56401. 6-4/92

Burdick Treadmill and EKG for lease/rent and used medical equipment and supplies for sale. Excellent condition. Call 218/828-1358. 6-4/92

Internist to join two internists in active practice in scenic upper Michigan. Medical school affiliation. Contact: North Shore Internal Medicine, 2420 First Avenue South, Escanaba, MI 49829; 906/786-1563. (*11/91-R)

Mora, Minnesota—Family Physician needed to join a seven-member FP group. We are a well-established, expanding practice and offer competitive salary and benefits package with partnership available. We have JCAHCO-accredited hospital, on-site consultations from numerous specialty disciplines, satellite offices located in Pine City and Hinckley. Mora is a progressive community located 65 miles north of the Twin Cities with an excellent school system and many cultural and recreational opportunities within easy

access. Contact: Larry J. Brettingen, M.D., 224 Seventh Street, Mora, MN 55051; 612/679-1340. 6-5/92

Family Practice: Northeastern Iowa. Become part of the growing Family Care Network. Established practice, ob optional, ample coverage. Small-town atmosphere, 40-bed hospital, 260-bed regional referral center within one-hour drive. Excellent income guarantee plus benefits. Wanda Parker, E. G. Todd Physician Search, Inc., 915 Broadway, Suite 1101, New York, NY 10010; 800/221-4762; fax: 212/777-5701. *5-4/92

Family Practice—Minnesota: Enjoy the benefits of country living yet have the resources of a major metropolitan area close at hand. Health One Buffalo Hospital is seeking a family physician to join two FPs and a nurse practitioner in its clinics in Annandale and Winsted. Share call with five physicians. Competitive compensation with excellent benefits including year-round outdoor recreation in "the heart of the lakes." Contact: Kim Isenberg, Health One Buffalo Hospital, 303 Catlin Street, PO Box 609, Buffalo, MN 55313; 612/682-1212, Ext. 245. 6-6/92

Wisconsin—Fourth BC/BE Obstetrician/Gynecologist needed to join stable, progressive, primary-care-based HMO/group practice in university town of 60,000 near Minneapolis/St. Paul. Excellent quality of life and outstanding recreational area. Competitive salary and fringe benefits. Con-

tact: Stuart R. Lancer, M.D., M.B.A., Medical Director, Group Health Cooperative, PO Box 3217, Eau Claire, WI 54702-3217; 715/836-8552. *4-6/92

Wisconsin—Family Practitioner Needed by progressive and growing group practice in west-central Wisconsin city of 60,000. Ninety miles from Minneapolis/St. Paul. Primarily prepaid practice with large component FFS. Highly competitive salary with excellent fringe benefits. Practice high-quality care in a good recreational area. Send CV to: Stuart R. Lancer, M.D., M.B.A., PO Box 3217, Eau Claire, WI 54702-3217; 715/836-8552. *4-6/92

One or Two Family Practice Physicians to join five family practitioners. Population 8,000. One hour south of Burnsville Center. Lakes, industry, negotiable salary. Clinic adjacent to hospital. Ample free time to enjoy family life. Contact James W. Dey, M.D., or Ruth Hawker, Clinic Manager, 501 North State Street, Waseca, MN 56093; 507/835-3110. (2/92-R)

The Monticello Clinic: Well-established multispecialty clinic adjacent to 39-bed acute-care/91-bed long-term care facility in a rural setting seeking a BC/BE family practitioner. Ideal location to raise a family. Thirty miles from large metropolitan area. Year-round cultural and recreational activities. Excellent salary guarantee, production incentive, and benefits package. For more information, contact: Pen-

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wanted for a progressive 16 physicians' group located in Hutchinson, MN, 60 miles west of the Twin Cities on Highway 7. State of the art hospital facilities attached to the Medical Center, competitive salary, professional growth opportunities and a dynamic community with an excellent economic base are the variables offered to the successful physician applicants.

Please send resume to
Brenda M. Maiers, Administrator
Hutchinson Medical Center, P.A.
3 Century Ave.
Hutchinson, MN 55350
Tel. (612) 587-2020 Ext. 214



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Contact: Jennifer Mitchell
Fairview Clinic Services
600 West 98th St, Suite 390
Bloomington, MN 55420

612-885-6224
1-800-842-6469

ny M. Vail, Director, Clinic Services, North Memorial Medical Center, 3300 Oakdale North—3E Perinatal, Minneapolis, MN 55422; 612/520-4839. 3-4/92

Northbrook Clinic: Special opportunity for BC/BE family practitioner to join a well-established, three-physician clinic. This practice will be moving in 1992 to a new facility. This northern suburb offers a safe family environment and outstanding educational, cultural, and recreational amenities. Excellent salary guarantee, production incentive, and benefits package. For more information, contact: Penny M. Vail, Director, Clinic Services, North Memorial Medical Center, 3300 Oakdale North—3E Perinatal, Minneapolis, MN 55422; 612/520-4839. 3-4/92

Wayzata Family Physicians: Special opportunity for BC/BE family practitioner to join a well-established, five-physician practice located in a prime suburb community near beautiful Lake Minnetonka. The area is surrounded by top-quality schools, shopping centers, and an abundance of recreational, family, and social activities. Excellent salary guarantee, production incentive, and benefits package. For more information, contact: Penny M. Vail, Director, Clinic Services, North Memorial Medical Center, 3300 Oakdale North—3E Perinatal, Minneapolis, MN 55422; 612/520-4839. 3-4/92

Southeast Wisconsin Pediatrics: Join busy pediatric group in prospering community close to Milwaukee, Madison, and Chicago. Rewarding lifestyle, capable colleagues, shared call, first-class hospital with special-care nursery. Please contact: Kathryn Iorio, M.D., Waukesha Pediatric Associates, Ltd., 1111 Delafield Street, #115, Waukesha, WI 53188; 414/542-6999. 3-4/92

Ideal Internal Medicine Practice: Excellent opportunity for BC/BE internist to establish a prosperous practice. Progressive 107-bed community hospital with a medical staff of 45 physicians and a service-area population of over 45,000. Vibrant Northern Michigan community with all summer and winter recreational activities. Salary guarantee of \$110,000 with excellent benefits. Send CV or contact: John Schon, Administrator, Dickinson County Hospitals, 400 Woodward Avenue, Iron Mountain, MI 49801; 800/323-8856. *1-4/92

BC/BE Internist with or without subspecialty training to join six other internists in 16-member multispecialty clinic in Worthington, Minnesota. Liberal vacation and meeting time including stipend. Contact R. D. Sudmeier, M.D., or John J. Sieve, Administrator, Worthington Medical Center, P.A., Worthington, Minnesota 56187; 507/372-2921. 3-5/92

Family Practice: Physicians seeking a BC/BE family practice physician for the Norway, Michigan, service area. The physician would have the option of joining one of the existing practices and/or setting up his/her own practice. Anderson Memorial Hospital is a part of Dickinson County Hospitals and has a service-area population of over 45,000.

Contact: Dr. Paul Hayes' office, 906/563-9255, or Dr. William Gladstone's home, 906/563-8743. Anderson Memorial Hospital, Main Street, Norway, MI 49870; 906/563-9243. *1-4/92

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Family Practice, Ob/Gyn, Internal Medicine, and Urgent Care positions are available in a variety of settings from Central Michigan, through Illinois, Wisconsin, and Nebraska, to the rolling plains of Kansas. Single or multispecialty groups, faculty, or solo with generous call coverage. Attractive guarantees and benefits. For more information, please contact our toll-free number, 800/243-4353, or send your CV to Strelcheck & Associates, Inc., 10624 North Port Washington Road, Mequon, WI 53092. *2-4/92

Diagnostic Radiologist: Excellent opportunity to join a three-man group in a flourishing general radiology practice that includes all modalities (angio and interv. limited at this point but could be expanded). Generous salary leading to early partnership in professional corporation. Great community where recreational and cultural activities abound. Relatively free from metro competitive hassles. Send CV to: James P. Zachman, M.D., Radiology Department, Rice Memorial Hospital, Willmar, MN 56201; 612/231-4530. 3-5/92

General Internist—St. Cloud, Minnesota: Opportunity available in a growing physician clinic of specialists and subspecialists of internal medicine. Community has three colleges, excellent school system, and abundant recreational activities. Family living conditions are excellent! The St. Cloud Clinic is located in a new facility with access to the latest medical technological developments. For more information about this position, please contact: Scott Davis, M.D., or Mark Murphy, Administrator, 1200 Sixth Avenue North, St. Cloud, MN 56303; 612/252-5131. 2-4/92

Rheumatologist—St. Cloud, Minnesota: Opportunity available in a growing physician clinic of specialists and subspecialists of internal medicine. Community has three colleges, excellent school system, and abundant recreational activities. Family living conditions are excellent! The St. Cloud Clinic is located in a new facility with access to the latest medical technological developments. For more information about this position, please contact: Scott Davis, M.D., or Mark Murphy, Administrator, 1200 Sixth Avenue North, St. Cloud, MN 56303; 612/252-5131. 2-4/92



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Continuing Medical Education: Third Annual Specialty Update hosted by the Division of General Internal Medicine, Medical College of Wisconsin, June 24-26, 1992. Location: The American Club resort and Blackwolf Run golf course, Kohler, Wisconsin. Course fee of \$360 includes two days of golf. Approved for seven category 1 CME credits. For registration and information contact: Amy Barnickel, 414/257-6040. *2-4/92

BC/BE Ob/Gyn needed to join active solo ob/gyn practice in suburban Minneapolis. Purchase of practice with favorable terms available if desired. Call 612/377-7373 evenings. 3-5/92

Door County, Wisconsin. Emergency Medicine. BC/BE family practice, internal medicine, pediatrics, or emergency medicine. General emergency medicine experience required.

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Pain Fellowship: Position for PGY4 or PGY5 to participate in a one- or two-year program of clinical pain management and clinical or basic research beginning July 1, 1992, sponsored by the Department of Neurology, Hennepin County Medical Center in Minneapolis. The program maintains an active outpatient practice and sees hospitalized patients on a referral basis from all departments. Opportunities to learn pharmacological management, acupuncture, peripheral nerve blockade, biofeedback techniques, and other areas related to pain are available. Hennepin County Medical Center is an equal opportunity educator and employer and specifically invites and encourages applications from women and minorities. Application and CV should be sent to: Miles J. Belgrade, M.D., Director, Hennepin Pain Clinic, Department of Neurology, Hennepin County Medical Center, 701 Park Avenue South, Minneapolis, MN 55415. 3-5/92

Great Opportunity for Family Practice Physician: \$100 M package guaranteed. Good fishing/hunting. Excellent school system. Southwest Minnesota, located two hours from Twin Cities, 40 minutes from Lake Okoboji. Send résumé to PO Box 310, Mountain Lake, MN 56159. 2-5/92

Medical Student Looking For a Small- to Medium-Sized Community Interested in Subsidizing Education. In return, student would make a commitment to practice in that community after his training. Contact: Thomas J. Rishavy, 612/343-0611. 1-4/92

Minneapolis Children's Medical Center's Clinic is seeking BC/BE pediatrician to join group of one part-time and three full-time general pediatricians working in in-house pediatrics clinic that serves local neighborhood, primarily inner city, and does primary, secondary, and tertiary care for special-needs patients. Position includes a moderately large inpatient service and includes teaching residents and medical students and a clinical faculty appointment at the University of Minnesota. There is considerable subspecialty support for the clinic and opportunity for clinical research. Minneapolis Children's has a family-oriented focus and is a 152-bed university-affiliated children's hospital that will expand to 187 beds within two years. Candidates send CV to Tom Olsen, M.D., Medical Director for Ambulatory Services, Minneapolis Children's Medical Center, 2525 Chicago Avenue South, Minneapolis, MN 55404; 612/863-6312. 1-4/92

General Surgeon: BC/BE to join progressive 24-physician multispecialty group practice. Advantages of rural setting with metropolitan practice style, 25 miles from Minneapolis. Group has excellent reputation and large geographical referral area. Recently expanded facility is adjacent to a newly remodeled 110-bed hospital. Comprehensive benefits package with excellent remuneration. For more information, contact Joseph E. Van Kirk, M.D., Lakeview Clinic, Ltd., 424 State Highway 5 West, Waconia, MN 55387; 612/442-4461 or 612/446-1295. 2-5/92

First Annual Clinical Neurology and Behavioral Science Symposium: Focus on Geriatrics. May 29-30, 1992, Landmark Inn Resort, Egg Harbor, Wisconsin. For more information, contact: Nadine Punke, Office of Medical Education, 1000 North Oak Avenue, Marshfield, Wisconsin 54449; 800/782-8581, Ext. 5207. 2-5/92

Pediatrician Wanted to work part time and to cover vacation time in solo pediatric office, Minneapolis, Minnesota. Send CV to: Dr. Nancy R. Lund, 825 South Eighth Street, #418, Minneapolis, MN 55404; 612/332-7300. *1-4/92

Family Physicians: Fremont Community Health Services, Inc., is seeking family physicians for our community clinics in north and northeast Minneapolis. Over 30,000 ambula-

tory visits last year, mostly low-income patients on a sliding fee schedule. Our staff includes board-certified family practitioners. We value the quality of service over volume. Send CV to: R. Scott Dyer, M.D., Medical Director, Fremont Community Health Services, 3300 Fremont Avenue North, Minneapolis, MN 55412; 612/588-9411. 1-4/92

Orthopedic Surgeon and Pediatrician: A growing university community in southern Minnesota has practice opportunities for an orthopedic surgeon and pediatrician. Excellent call schedule and outstanding financial compensation package. Attractive lifestyle for someone who enjoys hunting, fishing, a friendly community, and not spending time in traffic. Contact Verne Meyer, Staffing Consultant, Delacore, 101 Park Place, Hutchinson, MN 55350; or call 800/833-8487. 3-6/92

Family Practice—Minneapolis: BC/BE family practice physicians needed to join the Family Practice Department of a 350-physician multispecialty clinic in desirable Twin Cities area. Main center and branch office practices available. Salary and benefits are highly competitive. Send CV and letters of inquiry to Peter Garske, M.D., Park Nicollet Medical Center, 5000 West 39th Street, Minneapolis, MN 55416. 1-4/92



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General Interest: Park Nicollet Medical Center is a 350-physician multispecialty clinic in desirable Twin Cities area. Our general medicine sections are expanding in both urban and suburban locations. We offer competitive salaries and excellent benefits. If you are a BC/BE general internist interested in a group practice setting, send your CV to Steve Duane, M.D., Chairman, Department of Internal Medicine, Park Nicollet Medical Center, 5000 West 39th Street, Minneapolis, MN 55416. 1-4/92

New '92 Cars, Minivans, and Trucks—Save \$\$: Pay only a few hundred dollars over actual dealer cost! All makes and models. Full factory warranty. Save money. Save time. Save aggravation. Dealership delivery. Call Tom Rush at Auto Direct, 612/342-2886. (*4/92-R)

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Alexandria, Minnesota: Three-person internal medicine group desires to add a fourth partner. Send CV to J. E. McCrery, M.D., 1527 Broadway, Alexandria, MN 56308. 6-9/92

Internist—General or Subspecialist to join three internists in a growing internal medicine practice in St. Cloud, Minnesota. New, well-equipped office, three blocks from a tertiary service hospital. Enjoy the advantages of living in central

Minnesota: community of 50,000 with two universities, one hour from cultural and athletic events in the Twin Cities, and gateway to northern Minnesota's lakes and forests. Salary competitive. Please respond with CV to: Physician Recruitment, Associates of Internal Medicine, 1555 Northway Drive, Suite 270, St. Cloud, MN 56303. 1-4/92

Door County, Wisconsin: BC/BE internist. Modern, 89-bed community hospital with new outpatient services addition. Competitive guaranteed salary, incentive package, malpractice insurance, attractive benefits. Exceptional four-season recreation along Lake Michigan shores. Proximity to Milwaukee/Chicago. Top-rated schools. Quality community life. Send CV to: Priscilla Khoury, Physician Recruitment Coordinator, 330 South 16th Place, Sturgeon Bay, WI 54235. *3-6/92

Recruiting Health Team to accompany refugees returning to Guatemala, July 15-30, 1992. CME credits. Call or write: David L. Harris, M.D., Department of Surgery, Interstate Medical Center, Red Wing, MN 55066; 612/388-3503. 1-4/92

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†Constipation, which is easily managed in most patients, is the most commonly reported side effect of Calan SR.

‡Verapamil should be administered cautiously to patients with impaired renal function.

References: 1. Data on file, Searle. 2. Edmonds D, Würth JP, Baumgart P, et al. Twenty-four-hour monitoring of blood pressure during calcium antagonist therapy. In: Fleckenstein A, Laragh SH, eds. *Hypertension—the Next Decade: Verapamil In Focus*. New York, NY: Churchill Livingstone; 1987:94-100. 3. Midtbo KA. Effects of long-term verapamil therapy on serum lipids and other metabolic parameters. *Am J Cardiol*. 1990;66:131-151. 4. Fagher B, Henningsen N, Hultén L, et al. Antihypertensive and renal effects of enalapril and slow-release verapamil in essential hypertension. *Eur J Clin Pharmacol*. 1990;39(suppl 1):S41-S43. 5. Schmieder RE, Messerli FH, Garavaglia GE, et al. Cardiovascular effects of verapamil in patients with essential hypertension. *Circulation*. 1987;75:1030-1036. 6. Midtbo K, Lauve O, Hals O. No metabolic side effects of long-term treatment with verapamil in hypertension. *Angiology*. 1988;39:1025-1029.

BRIEF SUMMARY

Contraindications: Severe LV dysfunction (see *Warnings*), hypotension (systolic pressure < 90 mm Hg) or cardiogenic shock, sick sinus syndrome (if no pacemaker is present), 2nd- or 3rd-degree AV block (if no pacemaker is present), atrial flutter/fibrillation with an accessory bypass tract (eg, WPW or LGL syndromes), hypersensitivity to verapamil.

Warnings: Verapamil should be avoided in patients with severe LV dysfunction (eg, ejection fraction < 30%) or moderate to severe symptoms of cardiac failure and in patients with any degree of ventricular dysfunction if they are receiving a beta-blocker. Control milder heart failure with optimum digitalization and/or diuretics before Calan SR is used. Verapamil may occasionally produce hypotension. Elevations of liver enzymes have been reported. Several cases have been demonstrated to be produced by verapamil. Periodic monitoring of liver function in patients on verapamil is prudent. Some patients with paroxysmal and/or chronic atrial flutter/fibrillation and an accessory AV pathway (eg, WPW or LGL syndromes) have developed an increased antegrade conduction across the accessory pathway bypassing the AV node, producing a very rapid ventricular response or ventricular fibrillation after receiving I.V. verapamil (or digitalis). Because of this risk, oral verapamil is contraindicated in such patients. AV block may occur (2nd- and 3rd-degree, 0.8%). Development of marked 1st-degree block or progression to 2nd- or 3rd-degree block requires reduction in dosage or, rarely, discontinuation and institution of appropriate therapy. Sinus bradycardia, 2nd-degree AV block, sinus arrest, pulmonary edema and/or severe hypotension were seen in some critically ill patients with hypertrophic cardiomyopathy who were treated with verapamil.

Precautions: Verapamil should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) or impaired renal function, and patients should be monitored for abnormal prolongation of the PR interval or other signs of overdosage. Verapamil may decrease neuromuscular transmission in patients with Duchenne's muscular dystrophy and may prolong recovery from the neuromuscular blocking agent vecuronium. It may be necessary to decrease verapamil dosage in patients with attenuated neuromuscular transmission. Combined therapy with beta-adrenergic blockers and verapamil may result in additive negative effects on heart rate, atrioventricular conduction and/or cardiac contractility; there have been reports of excessive bradycardia and AV block, including complete heart block. The risks of such combined therapy may outweigh the benefits. The combination should be used only with caution and close monitoring. Decreased metoprolol and propranolol clearance may occur when either drug is administered concomitantly with verapamil. A variable effect has been seen with combined use of atenolol. Chronic verapamil treatment can increase serum digoxin levels by 50% to 75% during the first week of therapy, which can result in digitalis toxicity. In patients with hepatic cirrhosis, verapamil may reduce total body clearance and extrarenal clearance of digoxin. The digoxin dose should be reduced when verapamil is given, and the patient carefully

monitored. Verapamil will usually have an additive effect in patients receiving blood-pressure-lowering agents. Disopyramide should not be given within 48 hours before or 24 hours after verapamil administration. Concomitant use of flecainide and verapamil may have additive effects on myocardial contractility, AV conduction, and repolarization. Combined verapamil and quinidine therapy in patients with hypertrophic cardiomyopathy should be avoided, since significant hypotension may result. Concomitant use of lithium and verapamil may result in a lowering of serum lithium levels or increased sensitivity to lithium. Patients receiving both drugs must be monitored carefully. Verapamil may increase carbamazepine concentrations during combined use. Rifampin may reduce verapamil bioavailability. Phenobarbital may increase verapamil clearance. Verapamil may increase serum levels of cyclosporin. Verapamil may inhibit the clearance and increase the plasma levels of theophylline. Concomitant use of inhalation anesthetics and calcium antagonists needs careful titration to avoid excessive cardiovascular depression. Verapamil may potentiate the activity of neuromuscular blocking agents (curare-like and depolarizing); dosage reduction may be required. There was no evidence of a carcinogenic potential of verapamil administered to rats for 2 years. A study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. Pregnancy Category C. There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor, and delivery only if clearly needed. Verapamil is excreted in breast milk; therefore, nursing should be discontinued during verapamil use.

Adverse Reactions: Constipation (7.3%), dizziness (3.3%), nausea (2.7%), hypotension (2.5%), headache (2.2%), edema (1.9%), CHF, pulmonary edema (1.8%), fatigue (1.7%), dyspnea (1.4%), bradycardia: HR < 50/min (1.4%), AV block: total 1°:2°:3° (1.2%), 2° and 3° (0.8%), rash (1.2%), flushing (0.6%), elevated liver enzymes, reversible non-obstructive paralytic ileus. The following reactions, reported in 1.0% or less of patients, occurred under conditions where a causal relationship is uncertain: angina pectoris, atrioventricular dissociation, chest pain, claudication, myocardial infarction, palpitations, purpura (vasculitis), syncope, diarrhea, dry mouth, gastrointestinal distress, gingival hyperplasia, ecchymosis or bruising, cerebrovascular accident, confusion, equilibrium disorders, insomnia, muscle cramps, paresthesia, psychotic symptoms, shakiness, somnolence, arthralgia and rash, exanthema, hair loss, hyperkeratosis, macules, sweating, urticaria, Stevens-Johnson syndrome, erythema multiforme, blurred vision, gynecostasia, galactorrhea/hyperprolactinemia, increased urination, spotty menstruation, impotence.

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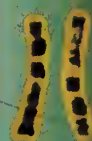
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- **Family Practitioner/Private Practice** Three well established and thriving group practices at Butterworth Hospital desire to expand by adding an additional BC/BE family practitioner. Join existing groups consisting of 2 - 5 physicians, OB optional. Desirable call schedules, competitive salaries and benefit packages.

- **Family Practitioner/Urgent Care Center** Join the growing field of ambulatory care, Med+Center BC/BE family practitioner needed to provide medical services to patients on a regularly scheduled basis. No call schedule, flexible hours, excellent compensation and benefits.

- **Family Practitioner/Primary Care Clinic** BC/BE family practitioner or internist needed for a large, primary care medical and dental clinic in Grand Rapids. The clinic is managed by Butterworth Ventures, the largest health care system in West Michigan and funded by private donations and a federal grant. Staffing includes 2 family practitioners, a pediatrician, nurse practitioner, medical director and support personnel. This is a salaried position with a competitive compensation and benefit package and 1 in 5 call schedule.

- **Internal Medicine/Faculty Position** Board certified general internist with teaching and clinical skills needed to join dynamic full-time academic faculty for internal medicine residency. Responsibilities include direct patient care in faculty practice, supervision and teaching of residents and students in both outpatient and inpatient settings. Competitive salary and benefits. Protected time is available for research and teaching.

- **Internal Medicine/Emergency Medicine** Immediate opening for a BC/BE internist with emergency medicine experience. Join a rapidly growing group of internists who cover the Emergency Room and in-house patients at United Memorial Hospital in Greenville, Michigan (1 hour from Lake Michigan and 35 miles from Butterworth Hospital). Flexible hours, no call, excellent reimbursement and benefit package.

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For information about the above positions, please call or write to
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MAY 1992

Minnesota Medicine

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COVER

Genetics plays a key role in our health, scientists are finding, but recent advances are outpacing medicine's ability to respond. In this month's cover story (page 18), we ask medical geneticists how primary care physicians can keep up with this fast-changing field. As our Face to Face interview (page 11) and clinical report (page 35) make clear, genetic discoveries have enormous implications for the future of medical practice.

Cover illustration by Carl Wesley of Minneapolis.

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HealthRight Has the Wrong Stuff

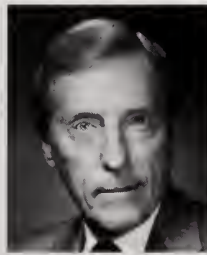
Edmund C. Burke, M.D.

A firestorm of dissatisfaction arose from a majority of physicians, clinics, and hospital administrators this legislative session, as we found ourselves trapped in a political catch-22 by the so-called HealthRight legislation. Most physicians wholeheartedly support the legislation's intent but adamantly oppose several of the bill's provisions, which actually could worsen the problems of health care access.

By opposing the legislation, which we did vociferously and in great numbers, we risked appearing self-serving. However, our concern is that HealthRight jeopardizes Minnesota's tradition of providing quality health care at costs below national averages. Minnesota is one of the healthiest states in the nation, according to studies conducted by Northwestern National Life Insurance, and our health care costs are among the nation's lowest.

The Minnesota Medical Association has clearly acknowledged HealthRight's positive aspects. Its goals—to provide access to the uninsured, to make health care affordable to everyone, to hold down costs, and to make health care delivery more efficient—are laudable. The concept is good. For this reason, some individual providers and some medical organizations, such as the Minnesota Chapter of the American Academy of Pediatrics and the Minnesota Nurses Association, supported the bill as a move in the right direction.

Nonetheless, HealthRight contains many flaws. Perhaps the most alarming is the effect a 2 percent tax on health care services, the legislation's primary funding mechanism, will have on rural hospitals. In a letter to the editor of the *Lake City Graphic* (March 26), Mark Reinhart, administrator of the Lake City



"We found ourselves caught in a political catch-22 by the so-called HealthRight legislation."

Hospital, writes, "Last year, Minnesota suffered a record number of hospital closures, all but one of which were rural. Another 27 small and rural hospitals lost money. Half of these losses were in excess of \$100,000 each! This 2 percent tax could very well be the death knell for more rural hospitals. How can access be improved if more hospitals close?"

Historically, Minnesota has not taxed necessities. Health care is a necessity. The burden of this tax would fall on the sick and on financially troubled rural hospitals and clinics. Like a number of groups, the MMA supported funding the program with a broad-based revenue source, such as the income tax.

Among the legislation's shortcomings is the fact that it won't solve the problem of access for the uninsured because it does not make health insurance mandatory. Additionally, it creates a state commission to set targets for reducing health care spending and to oversee the purchase of new medical technology—a new bu-

reaucracy that could interfere with medical decision making and stymie medical progress in Minnesota.

Finally, a provision requiring physicians to participate in the Medicaid program will make it harder to recruit health care workers in rural areas, where up to 50 percent of patients are covered by Medicare and Medicaid. Rural physicians will likely find it increasingly difficult to stay in practice, and rural hospitals and clinics, already struggling to attract physicians, will face one more obstacle.

Still, the news is not all bad. The legislation has positive aspects to it as well. For example, its insurance reform provisions call for eliminating discrimination against women and restricting the use of age in setting premium rates. The legislation also sets limits on administrative costs that insurance companies can recoup in premiums, and it provides a subsidized health plan that emphasizes preventive care and gives priority to low-income families with children. To help address rural health care concerns, it includes grants for distressed rural hospitals and loan forgiveness for medical students who agree to serve in rural areas.

Do the legislation's benefits outweigh its flaws? Most Minnesota physicians have their doubts, but perhaps we can take some comfort in these comments Gov. Arne Carlson made about the legislation in a recent Twin Cities *Star-Tribune* article: "Is it perfect? Absolutely not. Will we be back next year making changes? Very likely. We'll be back in '94, '95, '97, the year 2000. It's that kind of system. It'll always require monitoring and, yes, it will require changes."

Will Minnesota physicians be back next year advocating changes? Absolutely!

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‡ In some patients, the antihypertensive effect may diminish toward the end of the once-daily dosing interval. In such patients, an increase in dosage or twice-daily administration may be warranted.

ACCUPRIL is available in 10, 20, and 40 mg tablets. Usual initial starting dosage is 10 mg once daily.

ACCUPRIL is contraindicated in patients who are hypersensitive to this product and in patients with a history of angioedema related to previous treatment with an ACE inhibitor.

Please see brief summary of prescribing information on following page.

Accupril® (Quinapril Hydrochloride Tablets)

Before prescribing, please see full prescribing information. A brief summary follows.

INDICATIONS AND USAGE

ACCUPRIL is indicated for the treatment of hypertension. It may be used alone or in combination with thiazide diuretics.

In using ACCUPRIL, consideration should be given to the fact that another angiotensin-converting enzyme (ACE) inhibitor, captopril, has caused agranulocytosis, particularly in patients with renal impairment or collagen vascular disease. Available data are insufficient to show that ACCUPRIL does not have a similar risk (see WARNINGS).

CONTRAINDICATIONS

ACCUPRIL is contraindicated in patients who are hypersensitive to this product and in patients with a history of angioedema related to previous treatment with an ACE inhibitor.

WARNINGS

Angioedema: Angioedema of the face, extremities, lips, tongue, glottis, and larynx has been reported in patients treated with ACE inhibitors and has been seen in 0.1% of patients receiving ACCUPRIL. Angioedema associated with laryngeal edema can be fatal. If laryngeal stridor or angioedema of the face, tongue, or glottis occurs, treatment with ACCUPRIL should be discontinued immediately, the patient treated in accordance with accepted medical care, and carefully observed until the swelling disappears. In instances where swelling is confined to the face and lips, the condition generally resolves without treatment; antihistamines may be useful in relieving symptoms.

Where there is involvement of the tongue, glottis, or larynx likely to cause airway obstruction, emergency therapy including, but not limited to, subcutaneous epinephrine solution 1:1000 (0.3 to 0.5 mL) should be promptly administered (see ADVERSE REACTIONS).

Hypotension: Symptomatic hypotension was rarely seen in uncomplicated hypertensive patients treated with ACCUPRIL but, as with other ACE inhibitors, it is a possible consequence of therapy in salt/volume depleted patients, such as those previously treated with diuretics or dietary salt restriction or who are on dialysis (see PRECAUTIONS, DRUG INTERACTIONS, and ADVERSE REACTIONS). In controlled studies, syncope was observed in 0.4% of patients (N = 3203); this incidence was similar to that observed for captopril (1%) and enalapril (0.8%).

In patients with concomitant congestive heart failure, with or without associated renal insufficiency, ACE inhibitor therapy may cause excessive hypotension, which may be associated with oliguria or azotemia and, rarely, with acute renal failure and death. In such patients, ACCUPRIL therapy should be started at the recommended dose under close medical supervision. These patients should be followed closely for the first 2 weeks of treatment and whenever the dosage of antihypertensive medication is increased (see DOSAGE AND ADMINISTRATION).

If symptomatic hypotension occurs, the patient should be placed in the supine position and, if necessary, normal saline may be administered intravenously. A transient hypotensive response is not a contraindication to further doses; however, lower doses of ACCUPRIL or reduced concomitant diuretic therapy should be considered.

Neutropenia/Agranulocytosis: Another ACE inhibitor, captopril, has been shown to cause agranulocytosis and bone marrow depression rarely in patients with uncomplicated hypertension, but more frequently in patients with renal impairment, especially if they also have a collagen vascular disease such as systemic lupus erythematosus or scleroderma. Agranulocytosis did occur during ACCUPRIL treatment in one patient with a history of neutropenia during previous captopril therapy. Available data from clinical trials of ACCUPRIL are insufficient to show that, in patients without prior reactions to other ACE inhibitors, ACCUPRIL does not cause agranulocytosis at similar rates. As with other ACE inhibitors, periodic monitoring of white blood cell counts in patients with collagen vascular disease and/or renal disease should be considered.

Fetal/Neonatal morbidity and mortality: ACE inhibitors, including ACCUPRIL, can cause fetal and neonatal morbidity and mortality when administered to pregnant women.

When ACE inhibitors have been used during the second and third trimesters of pregnancy, there have been reports of hypotension, renal failure, skull hypoplasia, and death. Oligohydramnios has also been reported, presumably resulting from decreased fetal renal function; oligohydramnios has been associated with fetal limb contractures, craniofacial deformities, hypoplastic lung development, and intrauterine growth retardation.

Prematurity and patent ductus arteriosus have been reported, although it is not clear whether these occurrences were due to the ACE-inhibitor exposure or to the mother's underlying disease. It is not known whether exposure limited to the first trimester can adversely affect fetal outcome.

A patient who becomes pregnant while taking ACE inhibitors, or who takes ACE inhibitors when already pregnant, should be apprised of the potential hazard to her fetus. If she continues to receive ACE inhibitors during the second or third trimester of pregnancy, frequent ultrasound examinations should be performed to look for oligohydramnios. When oligohydramnios is found, ACE inhibitors should generally be discontinued.

Infants with histories of in utero exposure to ACE inhibitors should be closely observed for hypotension, oliguria, and hyperkalemia. If oliguria occurs, attention should be directed toward support of blood pressure and renal perfusion. Hemodialysis and peritoneal dialysis have little effect on the elimination of quinapril and quinaprilat.

No fetotoxic or teratogenic effects were observed in rats at quinapril doses as high as 300 mg/kg/day (180 and 30 times the maximum daily human dose when based on mg/kg and mg/m², respectively), despite maternal toxicity at 150 mg/kg/day. Tested later in gestation and during lactation, reduced offspring body weight was seen at ≥25 mg/kg/day, and changes in renal histology (juxtaglomerular cell hypertrophy, tubular/pelvic dilation, glomerulosclerosis) were observed both in dams and offspring treated with 150 mg/kg/day. Quinapril was not teratogenic in the rabbit; however, as noted with other ACE inhibitors, maternal toxicity and embryotoxicity were seen in some rabbits at quinapril doses as low as 0.5 mg/kg/day (one time the recommended human dose) and 1.0 mg/kg/day, respectively.

PRECAUTIONS

General

Impaired renal function: As a consequence of inhibiting the renin-angiotensin-aldosterone system, changes in renal function may be anticipated in susceptible individuals. In patients with severe heart failure whose renal function may depend on the activity of the renin-angiotensin-aldosterone system, treatment with ACE inhibitors, including ACCUPRIL, may be associated with oliguria and/or progressive azotemia and rarely acute renal failure and/or death.

In clinical studies in hypertensive patients with unilateral or bilateral renal artery stenosis, increases in blood urea nitrogen and serum creatinine have been observed in some patients following ACE inhibitor therapy. These increases were almost always reversible upon discontinuation of the ACE inhibitor and/or diuretic therapy. In such patients, renal function should be monitored during the first few weeks of therapy.

Some hypertensive patients with no apparent preexisting renal vascular disease have developed increases in blood urea and serum creatinine, usually minor and transient, especially when ACCUPRIL has been given concomitantly with a diuretic. This is more likely to occur in patients with preexisting renal impairment. Dosage reduction and/or discontinuation of any diuretic and/or ACCUPRIL may be required.

Evaluation of hypertensive patients should always include assessment of renal function (see DOSAGE AND ADMINISTRATION).

Hyperkalemia and potassium-sparing diuretics: In clinical trials, hyperkalemia (serum potassium ≤5.8 mmol/L) occurred in approximately 2% of patients receiving ACCUPRIL. In most cases, elevated serum potassium levels were isolated values which resolved despite continued therapy. Less than 0.1% of patients discontinued therapy due to hyperkalemia. Risk factors for the development of hyperkalemia include renal insufficiency, diabetes mellitus, and the concomitant use of potassium-sparing diuretics, potassium supplements, and/or potassium-containing salt substitutes, which should be used cautiously, if at all, with ACCUPRIL (see PRECAUTIONS, Drug Interactions).

Surgery/anesthesia: In patients undergoing major surgery or under anesthesia with agents that produce hypotension, ACCUPRIL will block angiotensin II formation secondary to compensatory renin release. If hypotension occurs and is considered to be due to this mechanism, it can be corrected by volume expansion.

Information for Patients

Angioedema: Angioedema, including laryngeal edema, can occur with treatment with ACE inhibitors, especially following the first dose. Patients should be so advised and told to report immediately any signs or symptoms suggesting angioedema (swelling of face, extremities, eyes, lips, tongue, difficulty in swallowing or breathing) and to stop taking the drug until they have consulted with their physician (see WARNINGS).

Symptomatic hypotension: Patients should be cautioned that lightheadedness can occur, especially during the first few days of ACCUPRIL therapy, and that it should be reported to a physician. If actual syncope occurs, patients should be told to not take the drug until they have consulted with their physician (see WARNINGS).

All patients should be cautioned that inadequate fluid intake or excessive perspiration, diarrhea, or vomiting can lead to an excessive fall in blood pressure because of reduction in fluid volume, with the same consequences of lightheadedness and possible syncope.

Patients planning to undergo any surgery and/or anesthesia should be told to inform their physician that they are taking an ACE inhibitor.

Hyperkalemia: Patients should be told not to use potassium supplements or salt substitutes containing potassium without consulting their physician (see PRECAUTIONS).

Accupril® (Quinapril Hydrochloride Tablets)

Neutropenia: Patients should be told to report promptly any indication of infection (eg, sore throat, fever) which could be a sign of neutropenia.

NOTE: As with many other drugs, certain advice to patients being treated with ACCUPRIL is warranted. This information is intended to aid in the safe and effective use of this medication. It is not a disclosure of all possible adverse or intended effects.

Drug Interactions

Concomitant diuretic therapy: As with other ACE inhibitors, patients on diuretics, especially those on recently instituted diuretic therapy, may occasionally experience an excessive reduction of blood pressure after initiation of therapy with ACCUPRIL. The possibility of hypotensive effects with ACCUPRIL may be minimized by either discontinuing the diuretic or cautiously increasing salt intake prior to initiation of treatment with ACCUPRIL. If it is not possible to discontinue the diuretic, the starting dose of quinapril should be reduced (see DOSAGE AND ADMINISTRATION).

Agents increasing serum potassium: Quinapril can attenuate potassium loss caused by thiazide diuretics and increase serum potassium when used alone. If concomitant therapy of ACCUPRIL with potassium-sparing diuretics (eg, spironolactone, triamterene, or amiloride), potassium supplements, or potassium-containing salt substitutes is indicated, they should be used with caution along with appropriate monitoring of serum potassium (see PRECAUTIONS).

Tetracycline and other drugs that interact with magnesium: Simultaneous administration of tetracycline with ACCUPRIL reduced the absorption of tetracycline by approximately 28% to 37%, possibly due to the high magnesium content in ACCUPRIL tablets. This interaction should be considered if coprescribing ACCUPRIL and tetracycline or other drugs that interact with magnesium.

Lithium: Increased serum lithium levels and symptoms of lithium toxicity have been reported in patients receiving concomitant lithium and ACE inhibitor therapy. These drugs should be co-administered with caution, and frequent monitoring of serum lithium levels is recommended. If a diuretic is also used, it may increase the risk of lithium toxicity.

Other agents: Drug interaction studies of ACCUPRIL with other agents showed:

- Multiple dose therapy with propranolol or cimetidine has no effect on the pharmacokinetics of single doses of ACCUPRIL.
- The anticoagulant effect of a single dose of warfarin (measured by prothrombin time) was not significantly changed by quinapril coadministration twice-daily.
- ACCUPRIL treatment did not affect the pharmacokinetics of digoxin.
- No pharmacokinetic interaction was observed when single doses of ACCUPRIL and hydrochlorothiazide were administered concomitantly.

Carcinogenesis, Mutagenesis, Impairment of Fertility

Quinapril hydrochloride was not carcinogenic in mice or rats when given in doses up to 75 or 100 mg/kg/day (50 to 60 times the maximum human daily dose, respectively, on a mg/kg basis and 3.8 to 10 times the maximum human daily dose when based on a mg/m² basis) for 104 weeks. Female rats given the highest dose level had an increased incidence of mesenteric lymph node hemangiomas and skin/subcutaneous lipomas. Neither quinapril nor quinaprilat were mutagenic in the Ames bacterial assay with or without metabolic activation. Quinapril was also negative in the following genetic toxicology studies: *in vitro* mammalian cell point mutation, sister chromatid exchange in cultured mammalian cells, micronucleus test with mice, *in vitro* chromosome aberration with V79 cultured lung cells, and in an *in vivo* cytogenetic study with rat bone marrow. There were no adverse effects on fertility or reproduction in rats at doses up to 100 mg/kg/day (60 and 10 times the maximum daily human dose when based on mg/kg and mg/m², respectively).

Pregnancy

Pregnancy Category D: See WARNINGS, Fetal/Neonatal morbidity and mortality.

Nursing Mothers

It is not known if quinapril or its metabolites are secreted in human milk. Quinapril is secreted to a limited extent, however, in milk of lactating rats (5% or less of the plasma drug concentration was found in rat milk). Because many drugs are secreted in human milk, caution should be exercised when ACCUPRIL is given to a nursing mother.

Geriatric Use

Elderly patients exhibited increased area under the plasma concentration time curve (AUC) and peak levels for quinapril compared to values observed in younger patients; this appeared to relate to decreased renal function rather than to age itself. In controlled and uncontrolled studies of ACCUPRIL where 918 (21%) patients were 65 years and older, no overall differences in effectiveness or safety were observed between older and younger patients. However, greater sensitivity of some older individual patients cannot be ruled out.

Pediatric Use

The safety and effectiveness of ACCUPRIL in children have not been established.

ADVERSE REACTIONS

ACCUPRIL has been evaluated for safety in 4960 subjects and patients. Of these, 3203 patients, including 655 elderly patients, participated in controlled clinical trials. ACCUPRIL has been evaluated for long-term safety in over 1400 patients treated for 1 year or more.

Adverse experiences were usually mild and transient.

Discontinuation of therapy because of adverse events was required in 4.7% of patients treated with ACCUPRIL in placebo-controlled hypertension trials.

Adverse experiences probably or possibly related to therapy or of unknown relationship to therapy occurring in 1% or more of the 1563 patients in placebo-controlled hypertension trials who were treated with ACCUPRIL are shown below.

Adverse Events in Placebo-Controlled Trials

	ACCUPRIL (N = 1563) Incidence (Discontinuation)	Placebo (N = 579) Incidence (Discontinuation)
Headache	5.6 (0.7)	10.9 (0.7)
Dizziness	3.9 (0.8)	2.6 (0.2)
Fatigue	2.6 (0.3)	1.0
Coughing	2.0 (0.5)	0.0
Nausea/Vomiting	1.4 (0.3)	1.9 (0.2)
Abdominal Pain	1.0 (0.2)	0.7

Clinical adverse experiences probably or possibly related, or of uncertain relationship to therapy, occurring in 0.5% to 1.0% (except as noted) of the patients treated with ACCUPRIL (with or without concomitant diuretic) in controlled or uncontrolled trials (N = 4397) and less frequent, clinically significant events seen in clinical trials or post-marketing experience (the rarer events are in italics) include (listed by body system):

General: back pain, malaise

Cardiovascular: palpitation, vasodilation, tachycardia, heart failure, hyperkalemia, myocardial infarction, cerebrovascular accident, hypertensive crisis, angina pectoris, orthostatic hypotension, cardiac rhythm disturbances

Gastrointestinal: dry mouth or throat, constipation, gastrointestinal hemorrhage, pancreatitis, abnormal liver function tests

Nervous/Psychiatric: somnolence, vertigo, syncope, nervousness, depression

Integumentary: increased sweating, pruritus, exfoliative dermatitis, photosensitivity reaction

Urogenital: acute renal failure

Other: myopia, pharyngitis, sinusitis, bronchitis, agranulocytosis, thrombocytopenia

Angioedema: angioedema has been reported in patients receiving ACCUPRIL (0.1%). Angioedema associated with laryngeal edema may be fatal. If angioedema of the face, extremities, lips, tongue, glottis, and/or larynx occurs, treatment with ACCUPRIL should be discontinued and appropriate therapy instituted immediately (see WARNINGS).

Clinical Laboratory Test Findings

Hematology: (See WARNINGS)

Hyperkalemia: (See PRECAUTIONS)

Creatinine and blood urea nitrogen: Increases (>1.25 times the upper limit of normal) in serum creatinine and blood urea nitrogen were observed in 2% and 2%, respectively, of patients treated with ACCUPRIL alone. Increases are more likely to occur in patients receiving concomitant diuretic therapy than in those on ACCUPRIL alone. These increases often remit on continued therapy.

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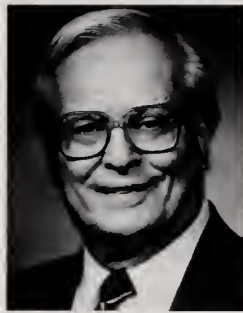
Examining the Past, Present, and Future of Clinical Genetics

Minnesota Medicine interviews Hymie Gordon, M.D.

Dr. Hymie Gordon is considered an expert in medical genetics. Now a professor emeritus of medical genetics at Mayo Clinic, Dr. Gordon first became interested in the field while working as a cardiologist at the Johns Hopkins University School of Medicine in 1959 with the renowned Dr. Victor McKusick, retired chief of medicine and Osler professor of medicine. In 1958, soon after the structure of DNA was discovered, Dr. McKusick started the nation's first clinical genetics training program, realizing that genetics would soon have an enormous impact on clinical medicine. In the following interview, Dr. Gordon discusses the advent of clinical genetics as well as the importance of the Human Genome Project and its ethical implications.

Dr. Gordon, who was born in the Union of South Africa and attended medical school at the University of Cape Town, returned to South Africa in 1961 and established a genetics teaching and research program at the University of Cape Town. After nine years, he emigrated to the United States and joined Mayo Clinic, where he was again charged with the task of developing a program in medical genetics. In January 1972, he became Mayo Clinic's first chair of the Department of Medical Genetics and the medical school's first professor of medical genetics. He retired from clinical practice in 1989 and is now completing several genetic-research projects.

Dr. Gordon is also considered an expert in medical history, an area in which he first acquired an interest as a teenager. He maintains a large collection of art and medical history books, including many rare editions, and he is also versed in Talmudic studies. As a consultant in the history of medicine, he is presenting a 60-lecture series, "History for Physicians," at Mayo Clinic. In this interview, he discusses the history of genetics as well as its implications for the future, and he describes how both the past and the future are shaping clinical genetics today.



Hymie Gordon, M.D.

"In the foreseeable future, it will become possible to examine an individual's entire genetic endowment, possibly soon after conception."

Minnesota Medicine: Dr. Gordon, please tell us a little about your educational background.

Gordon: I regard myself primarily as a physician—as an internist concerned with all kinds of disease—but I have specialized in the clinical application of genetics, such as diagnosing and treating patients with genetic disorders and helping families with genetic problems—detecting carriers, counseling them about their family planning, and so on. I had the good fortune to spend two years at the Johns Hopkins University School of Medicine with Dr. Victor McKusick around 1960, a time when clinical genetics, for practical purposes, was just starting. I originally went to work with him as a cardiologist, but I quickly changed my direction to genetics, with which I've remained ever since.

Minnesota Medicine: Dr. McKusick was one of your teachers, perhaps a mentor. As a pediatrician, myself, I know he has had an enormous impact on the practice of pediatrics. What are some of his contributions?

Gordon: Historically, Victor McKusick will be regarded as a pioneer of clinical genetics, meaning the practical application of genetics to the day-to-day practice of medicine. He is a great systematizer and synthesizer. He has a special ability to gather information from all clinical and laboratory subspecialties and to assemble it in a form easily retrievable by others. Before the establishment of Dr. McKusick's genetics program at Johns Hopkins, there was almost no such thing as "clinical genetics." In fact, during my earlier years in medicine, we had to consult the local professor of zoology about patterns of inheritance. Physicians didn't know what "dominant" and "recessive" were all about.

Examining the History of Genetics

Minnesota Medicine: Dr. Gordon, you are an eminent professor in the history of medicine. Please tell us a little

about the history of genetics, particularly the ancient history.

Gordon: As long as we humans have existed, we have thought about where we come from and what determines our behavior and our physical characteristics. Writings about this go back to the beginning of recorded time. Ever since humans began practicing agriculture about 10,000 years ago, they have been concerned with the selective breeding of crops and flocks with desirable characteristics. Thus, even before the beginning of recorded history, humans were concerned with genetics. Historically, all sorts of ideas have prevailed about the inheritance of characteristics. For instance, it was very commonly believed that external events during pregnancy—say astrological influences—could determine an unborn baby's development. It was also believed that the transmission of hereditary traits was a much more simple process than we now know it to be.

Minnesota Medicine: You have devoted much of your spare time to Talmudic studies, the study of Jewish tradition. How does this relate to genetics?

Gordon: The Talmudic writings reveal some remarkable insights. Talmudic writings from about the year 300 of the Christian era give a remarkable account of a consultation held by rabbis near the town of Sepharis in the Galilee. Sisters from one family had consulted a rabbi because two of the sisters had given birth to baby boys who bled to death after they had been circumcised. The sisters asked what subsequent sisters should do if they, too, had baby boys. Some rabbis argued that if a third sister's son also bled, the fourth sister should not circumcise her son. But the prevailing rabbinical opinion was that the third sister should not circumcise her son. Significantly, they were concerned about sons born to sisters—not about sons born to brothers. Nowadays, we know that this transmission of a genetic disorder by sisters is indicative of the X-linked inheritance of hemophilia. Females, not males, are carriers of the mutant gene that causes hemophilia, and, if a hemophilic boy is circumcised, he could have a very serious hemorrhage. In fact, quite often, the first indication of hemophilia is hemorrhage after circumcision. It's interesting that this kind of insight was available, presumably as a result of experience, almost 1,700 years ago.

Minnesota Medicine: Let's make a jump in time to 1953, when Watson and Crick discovered the double helix. Some people have equated the impact of this discovery with that of the Manhattan Project or the Apollo moon landing. How important is this discovery?

Gordon: I have no doubt that the discoveries about the molecular basis of the genetic processes are among the greatest scientific accomplishments of all time. I have no

hesitation in equating their importance with the discovery of nuclear energy. I would rank their importance far ahead of space travel. I believe that the two greatest scientific discoveries of the 20th century are nuclear energy and the genetic mechanism, and they are as important as any scientific discoveries that have ever been made.

Deciphering the Genetic Code

Minnesota Medicine: The Human Genome Project is now underway with \$3 billion allocated over the course of 15 years. This is an incredible undertaking. Tell us a little bit about this project and what outcome can be expected.

Gordon: There's an enormous amount of DNA in every single cell in our bodies. As you know, DNA carries the genetic code, which resides in the combinations and permutations of the four bases—adenine, thymine, guanine, and cytosine. There are six billion of these bases in each cell in our bodies. DNA is a double strand, so we can determine the genetic code by sequencing the bases in one strand—a mere three billion bases. Just to give you an idea of how large

this number is, if we took the DNA from all the cells in a person's body and unraveled it, it would extend from the earth to the sun and back 20 times. That's the amount of DNA packaged into the nuclei of our cells. That's a lot of DNA in the human body. When the three billion bases have been sequenced, that is, when our genome has been decoded, it will fill about 600,000 closely printed pages. You might best understand this if you consider the Encyclopaedia Britannica, with each volume consisting of about 1,000 pages. If you wanted to carry your genetic code around with you, you'd have to carry a library the size of 600 volumes of the Encyclopaedia Britannica. We're dealing with big numbers.

Minnesota Medicine: What is the purpose of deciphering the genetic code?

Gordon: One obvious reason is to decode all genes. About 10 percent of the three billion bases include the genetic code for all our genes. No one knows just how many genes there are, but estimates range anywhere from about 30,000 to 100,000; I believe it's at least 50,000. It's very important to determine the genetic code for all these genes because then we will begin to understand how our genes work and what messages they encode. We also will be able to understand and observe what goes wrong. We already know, for example, that several different mutations in a certain gene can cause cystic fibrosis. It would be very, very helpful to know the nature of the molecular defects responsible for such common genetic disorders as sickle cell disease and cystic fibrosis, but that's only one part of the story.

The DNA that makes up the gene sequences is only

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a small fraction of the three billion bases. There's also an enormous amount of DNA between the genes, and even within the genes, that has no coding function at all, but it is just as important as the coding DNA. Let me give you an illustration. The DNA sequence (code) of the gene responsible for the synthesis of insulin is known, but we don't know very much about what regulates this gene—what tells the gene to direct more production of insulin after a meal, and what tells the gene to slow down the production of insulin when our blood sugar level is falling. One of the essential concepts for understanding the genetic mechanism is to appreciate that our genes are carefully regulated. They don't act in a vacuum; they respond to external stimuli. Presumably, the insulin gene responds to the level of blood sugar, and the genes for other hormones probably respond to other environmental variables. We'll never understand the action of genes and how they go wrong if we concentrate only on the coding sequences. We also need to know about the regulatory sequences, and for this reason it is essential that we sequence the entire human genome—all three billion bases. It's actually being done at a bargain rate—only \$1 per base.

Progress is being made about as quickly as one might have anticipated, but whether the entire sequencing will be finished within 15 years remains to be seen.

One of the concerns I have about the sequencing of the human genome is how it's going to be recorded—who's going to write it down, who's going to put it into a computer, who's going to check it for typing errors? Remember, we're dealing with 600 big volumes of information, and this is going to need an enormous amount of proofreading. How it will be stored and retrieved and, of greatest importance, who will have access to it are questions that have not yet been adequately answered. These are controversial issues, but the idea that we should know the entire human genetic code should be beyond any controversy.

Changing the Future of Medical Practice

Minnesota Medicine: Efforts to tinker with genes have already taken place in agriculture and horticulture. Would you say gene therapy is one of the ultimate objectives?

Gordon: Without a doubt. The efforts of molecular geneticists would not be totally satisfying if human gene therapy were not the ultimate objective. Currently, all we can do with our knowledge of genetic codes is to facilitate diagnosis. It's now possible to use genetic analysis to identify a woman who might be carrying the gene for muscular dystrophy or hemophilia, or to identify people who might be carriers of cystic fibrosis. Mild cases of cystic fibrosis were previously hard to diagnose, but now a DNA analysis of the patient and the patient's relatives adds much greater precision to the diagnosis. This kind

of diagnosis is already becoming part of general medical practice. In the foreseeable future—by the turn of the century—it will be possible to diagnose just about any inherent disorder by DNA analysis—including susceptibilities to diseases as well as the diseases themselves. We might be able to identify individuals who are susceptible to the future development of coronary heart disease, hypertension, cancers, glaucoma, or schizophrenia in certain environmental circumstances. This has enormous implications for the future of medical practice—and it generates profound ethical questions.

Confronting Ethical Concerns

Minnesota Medicine: The Human Genome Project has an ethics subcommittee and has set aside about 3 percent of its budget to consider ethical issues the project raises. What ethical issues are they discussing?

Gordon: My impression is that the ethics committee is primarily concerned with establishing guidelines for human gene therapy. This is of enormous importance, and I don't want to minimize it. We can reasonably anticipate that—in the very near future—if a child is identified as having a genetic disorder such as cystic fibrosis, we'll be able to correct the defect by inserting a normal gene to replace the abnormal one. This raises a major ethical issue because it will be experimental medicine. Who's going to decide whether a particular experiment is justified for a given baby? Questions will need answers: Is the therapy worth trying? Has the technology advanced far enough to make the treatment feasible? Is the

treatment likely to help the child or is it just a shot in the dark? Will the treatment have serious side effects? By introducing a new gene it may be possible to replace the defective gene, but will that new gene interfere with the activity of other genes? These are just some of the issues that still have to be resolved in regard to gene therapy. Guidelines must be established to ensure that experiments are done in the best interest of the patient. And there are many more areas of ethical concern.

Minnesota Medicine: What do you think is the most important ethical issue?

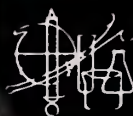
Gordon: I foresee a much greater ethical problem for the future—one that boggles my mind! In the foreseeable future, I mean not more than 20 years from now, it will become possible to examine an individual's entire genetic endowment, possibly even soon after conception, and determine whether the individual is destined to have glaucoma, schizophrenia, hypertension, coronary heart disease, some kind of cancer, myopia, or blond hair and blue eyes. In other words, it will become possible to identify prenatally almost everything about an individual's biological potential. So what's going to happen? Are parents going to decide they don't want a baby because

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she eventually might have breast cancer, or because she eventually might have glaucoma? Every one of us carries genes that make us susceptible to all kinds of diseases; there can never be such a thing as a perfect human genetic code. Does this mean every baby will have a prenatal DNA analysis and every baby will be destroyed because she or he will be shown to be susceptible to some disease in the future? This may sound like science fiction, but what once was science fiction is now becoming scientifically feasible.

Initially, some people will be more concerned about the ethical implications for adults. If someone applies for insurance, will the insurance company demand a DNA analysis to find out whether the person is going to get carcinoma of the pancreas or whether the person is susceptible to some other major disease? Decades ago we ran into awful difficulty when a relatively simple laboratory procedure became available to diagnose carriers of sickle cell disease. Many carriers—healthy people—were denied insurance and were denied certain kinds of jobs. What's going to happen now? Are people going to be denied insurance and jobs because they carry certain combinations of DNA? Every one of us, without exception, has some unsatisfactory combination of DNA in our genomes, and every one of us is susceptible to some or other disease. How is this going to be handled? How will we use our ability to determine a baby's entire medical future even before that baby is born? These, in my mind, are the huge ethical issues that, so far, have received less attention than the more immediate practical concern about which types of gene therapy should be tested in humans.

Acknowledging Limitations

Minnesota Medicine: We might assume that a lab test or procedure is 100 percent accurate, but we know that just isn't so. What are the limitations to genetic testing?

Gordon: In theory, there will be no limitations, but you make a very important point. Eventually, it will be possible to identify every aberration among those three billion bases. However, with today's technology, this is still very difficult. It's not nearly as easy as getting a patient's blood-sugar or serum-protein level. As you pointed out, even these tests are susceptible to error. But it's just a question of refining the technology. I still remember how difficult it was—just 15 years ago—to sequence a single gene; the procedures were painfully slow and cumbersome and took years of Nobel-prize-winning effort. Now the technology is improving rapidly and is largely automated; the sequencing of long stretches of DNA can be done very quickly and accurately, but the technology is still limited. I would not yet trust a DNA analysis absolutely. I would look at it with the same skepticism I might have applied to the results of a hormonal assay 20 or 30 years ago. But technology is advancing very rapidly, and I have little doubt that genetic testing will be highly reliable within the foreseeable future.

MM

Hennepin County's Drop Your Guns Campaign

Sound Strategy or Merely Popular Policy?

Jon Roesler, M.S.

The Hennepin County Attorney's Office received much notoriety because of its recent "Drop Your Guns" campaign. In this program, Hennepin County residents were urged to bring their guns to local fire stations in exchange for \$50, no questions asked. The campaign was so successful at its onset that the program twice ran out of money set aside for the purchase of guns, and adjacent Ramsey County decided to establish a similar program.

The intent of "Drop Your Guns" was to reduce the availability of guns, with the expectation that intentional (and some unintentional) injury would be reduced, especially homicide and suicide. This is a particularly laudable goal, as Minneapolis, our state's largest city, experienced its highest-ever number of homicides in 1991.

My intuition tells me that this program will work, since using a gun seems the easiest way to inflict harm on someone else. A knife requires getting close to the victim, and a car is difficult to maneuver inside a bar room. But a gun, as modeled by so many television programs, seems just the right tool. If people willingly give up their most effective means of inflicting injury, then it seems they will be less likely to maim or kill.

However, my training as an epidemiologist requires me to reach beyond my intuition and look for a scientific basis to this argument. Is there evidence this program will work? Will buying back guns really reduce the number of homicides? Is this campaign an effective public health strategy? Or is it merely popular public policy? Two pieces of evidence point to the latter.

First, the intervention was probably too weak. The fire station at 821 East 35th Street, located adjacent to the Central Neighborhood in Minneapolis, tied for the lowest number of guns collected—69. Notably, several drive-by shootings have occurred in this neighborhood, which is home to much gang activity and the notorious "crack alley." The three suburbs in the program had considerably higher numbers of guns collected, with 516

in Brooklyn Park, 547 in St. Louis Park, and 576 in Richfield.¹

Second, and even more troubling, is a recent epidemiological study published in the *American Journal of Epidemiology* that raises serious questions about the conventional wisdom that increased possession of firearms results in higher homicide rates. In a natural experiment comparing similar populations in the United States (with high handgun ownership rates) and Canada (with low handgun ownership rates), the author found no relation between handgun ownership and overall homicide rates. He concluded that even if U.S. officials were able to reduce the number of handguns in the U.S. population, there is no reason to believe that U.S. residents would be any less creative than their Canadian neighbors in finding ways to kill each other.² This epidemiological study is especially disconcerting to me, for it



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flies in the face of my intuition. I would have expected, given the involvement of guns in homicides, that if we could reduce the number of guns in our society, we would be able to reduce the number of homicides. But then that is the purpose of epidemiology: to identify the cause and provide a scientific basis for intervention, regardless of whether or not such evidence is consistent with expectations.

As a resident of the Central Neighborhood in Minneapolis, I see firsthand what I believe to be part of the problem: the increasing instability of the family unit, the descending spiral of hopelessness and despair associated with poverty and our current system of welfare, and urban professional and middle-class abandonment of our inner cities.³ Substance abuse and violence become increasingly intertwined with the problem. The solution to the problem is not tried and true, but public policies directed toward maintaining and strengthening the family unit, creating new and innovative systems of welfare, and encouraging urban professionals

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In a couple years, someone will be able to do a time-series analysis of the homicides and other intentional injuries in Hennepin County to see whether "Drop Your Guns" had an effect. The goal of this program is surely meritorious, and I sincerely hope it is effective. Unfortunately, current evidence suggests that if gun ownership results in increased homicides, then the intervention was too weak in the areas where we need the biggest impact. Even more unsettling is the possibility that gun ownership may not be related to the homicide rate at all. If this is the case, the program represents a classic example of treating a symptom without addressing the problem.

The epidemiology of intentional injury is complex and needs continued exploration. I must leave it to others to explore the issues more fully. However, what can be said at this juncture of time and place is that such programs as "Drop Your Guns" represent little more than popular and highly publicized, but ineffectual, flailings at a problem that is both deeper and broader than mere gun ownership. Little will change the rates of intentional injury until we are able and willing to address the real problem.

MM

Jon Roesler is currently enrolled in the Ph.D. program in epidemiology at the University of Minnesota.

REFERENCES

1. Karrigan J. Tied for last place... Minneapolis. The Powderhorn Paper 1992; 2(3):3.
2. Centerwall BS. Homicide and the prevalence of handguns: Canada and the United States, 1976 to 1980. Am J Epidemiol 1991;134:1245-60.
3. Malkis A. The face of the Twin Cities: trends affecting health and human services in the '90s. In: Drug abuse in Minnesota: proceedings of the State Epidemiology Work Group. St. Paul: Minnesota Department of Human Services, October 1991.

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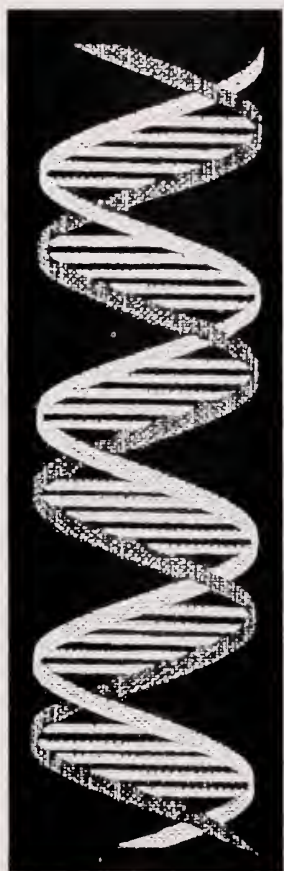
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Is the New Genetics *Outpacing Primary Medicine?*

Front-line physicians are finding they can't keep up with the rapid advances in medical genetics. What they need to know, say experts in the field, is what they know, what they don't know, and what resources are available. And, of course, they need to know the patient's family history.

... By *Miriam K. Feldman*

It happens all the time. Someone will say to Richard King, M.D., "I just saw this interesting patient."

"What was the family like?" King asks.

"I never thought to ask," comes the reply.

"Ask," says King, a professor of medicine and pediatrics at the Institute of Human Genetics and director of the Division of Genetics and Metabolism at the University of Minnesota. "Take a relevant family history. That is the key to the whole thing."

As scientists daily unravel more of the mystery of our human genetic code, they are finding that genetics plays a key role in our health. For now, their discoveries are outpacing medicine's ability to respond. But one thing is for sure. A patient who walks into a doctor's office never walks in alone; she brings along the health history of her entire family.

"We've gone from thinking 20 years ago that genetics dealt with rare things in the pediatric population, to now thinking that genetics is a major player in adult and pediatric problems. All diseases (even infectious diseases) in the adult population have a genetic basis," says King, who is senior author of a new book, "The Genetic Basis of Common Diseases."

Genetics, at one time a field dominated by Ph.D.s in university biology departments, is heading straight into mainstream medicine as the ability to test people for a variety of disorders grows, along with the tantalizing prospect of genetically engineered cures. In 1984, the American Board of Medical Genetics administered the first exam to certify physicians (in December 1991 it became the 24th member of the American Board of Medical Specialties). Today it's not uncommon for specialists, particularly pediatricians and internists, to follow their training with a three-year fellowship in genetics.

It is a specialty so complex that Pamela S. Karnes, M.D., of the Department of Medical Genetics at the Mayo Clinic, worries that it will be difficult for physicians to keep up with both their busy practices and the onslaught of new information. "It's next to impossible for most practicing physicians to keep on top of advances that are made almost every day.... They just don't have time." What's more, Karnes says it's not fair to expect physicians not trained in genetics to understand the nuances of all the available genetic tests. Her job, she says, is to know what tests are available and to share that information with other physicians.

"Physicians are going to need to know what they know, what they don't know, and what resources are available," says Bonnie LeRoy, director of the graduate program in genetic counseling in the Institute of Human



ILLUSTRATIONS BY CARL WESLEY

Genetics at the University of Minnesota.

Genetics is going to assume a greater role in clinical practice for two reasons, says Virginia Michels, M.D., who chairs the Department of Medical Genetics at Mayo Clinic. First, the technology developed in the last several years has made possible a whole new range of genetic testing. And second, more and more diseases are now recognized as having a familial, genetic component.

This new way of thinking poses both practical and ethical challenges for the physician on the front line. Practically speaking, most medical schools didn't teach genetics until recently. And as Karnes made clear, the field is expanding so rapidly that even geneticists have trouble keeping up.

On the ethical side, physicians will be faced

with questions of whom and when to test, what information to divulge to patients, how to assure patient confidentiality to avoid insurance and workplace discrimination, and what to do with genetic test results, especially when there's no medical solution.

Susan Berry, M.D., who teaches a required course in human genetics to University of Minnesota medical students, says physicians have always been involved in genetics, but awareness among the medical community has grown over the past 15 years, particularly the past five, with the discovery of genetic engineering techniques that allow researchers to analyze and alter genetic material, and with the advent of the Human Genome Project.

The \$3-billion, federally funded Human Genome Project promises to map the estimated 100,000 genes locked inside each of our cells. For 15 years, biologists, chemists, mathematicians, computer scientists, engineers, and others will be working worldwide to identify the full set of inherited instructions contained in each of our cells.

The Human Genome Project, says King, will provide "the periodic table of genetics." From there, scientists will begin the task of understanding how genes control bodily functions, which in turn will enable them to devise new strategies to diagnose, treat, and possibly prevent disease.

Today, clinical medicine finds itself a few steps behind the technology. "Our ability to make diagnoses and to provide information to individuals and their families based on their genetic background is well ahead of our ability to do anything about it," says King. A doctor can tell a patient that he will get Huntington's disease, but there's no cure for it.

Curiously, people tend to want to know about their medical destinies, even if medicine can't offer anything more than a devastating prognosis. As soon as the location of the gene for Huntington's disease was discovered, people were lined up waiting to be tested, says King. "The people are going to demand it, so the physician is going to have to deal with it."

Ignorance of Genetics May Lead More Doctors to Court

By Beverly Merz

• • • •

Editor's Note: Stunning progress in medical genetics has opened new realms of science, ethics, and law. As revealed by the following article, reprinted from the April 22/29, 1991, AMNews, physicians may find the medico-legal ground shaky until a clear standard of care has been identified in areas related to genetic testing, screening, and counseling.

As the Human Genome Project progresses, it is presenting new challenges to molecular biologists, medical geneticists, primary care physicians—and malpractice attorneys.

The architects of the \$3-billion, 15-year, federally funded effort to map and sequence all 100,000 human genes had intended that the project provide a host of diagnostic and therapeutic benefits. However, it is doubtful that even the most prescient envisioned some of the medico-legal issues that would be spawned by the genetics revolution.

Many of these issues were aired in Houston last year at the first national conference to explore the project's ethical and legal ramifications. The gathering was co-sponsored by the NIH National Center for Human Genome Research and the Health Law and Policy Institute of the University of Houston. It was one of 19 such symposia to be held as part of the center's Ethical, Legal, and Social Implications Program.

"The Human Genome Project may vastly increase the occasions for medical malpractice litigation," Alan Weisbard, a professor at the University of Wisconsin schools of law and medicine, said at the conclusion of the three-day session.

Agreeing was Lynn Fleisher, Ph.D., a lawyer with the Chicago firm of Sidely & Austin. Fleisher, whose

doctorate is in genetics, predicts a sharp increase in the number of cases in which physicians are charged with failure to inform patients of prenatal and carrier screening tests. The increase in legal action will be due to the rapid evolution of the concept of the standard of care as applied to genetics counseling, she said.

Fleisher said that as a result of the influx of genetic information in the last decade, the courts are likely to be harder on physicians who have given inaccurate information about the risks of hereditary defects.

The picture Fleisher painted was much more complicated than the legal landscape of the 1970s, when primary care physicians were not held responsible for providing genetics information to their patients.

However, the 1973 *Roe v. Wade* decision, which legalized abortion, and the 1978 *Park v. Chessin* decision, which recognized the physician's responsibility to inform the mother of the risks of having an affected fetus, changed things. In tandem, these decisions set the stage for a spate of "wrongful birth" litigation during the 1980s.

During that decade, the courts upheld several suits that have made physicians legally liable for depriving parents of the opportunity to prevent the birth of an affected child. While courts in only a few states have awarded damages for emotional or physical suffering to either parent or child in wrongful birth litigation, many have awarded damages for extraordinary medical expenses.

Grounds for such awards have included failure to recognize the hereditary nature of a disease, failure

to take a family history of people at risk for genetic disorders, failure to refer patients to genetic counseling, negligent genetic testing, negligent sterilization of patients who are carriers of genetic diseases, and negligent abortion of affected fetuses.

Fleisher predicts lawyers will find even more examples of malfeasance in genetics during the 1990s. "This decade is going to make the changes of the '80s look like they were in slow motion."

There are already examples. She notes one case in which a court decided against a physician who failed to counsel a non-Jewish couple about the availability of a

"The Human
Genome Project
may vastly increase
the occasions for
medical
malpractice
litigation."

—Alan Weisbard

Some people want to know about their genetic make-up so they can make lifestyle changes or screen more vigilantly for certain conditions. Others simply want to know what to expect. One of the more common clinical applications of genetics today, the genetic screening and counseling of

prenatal test for Tay-Sachs disease, although the couple's chances of having an affected child were extremely small. To be on the safe side, she advises, physicians should tell patients about all available genetic screening tests.

That's good advice, says John Robertson, a professor at the University of Texas School of Law. To follow through, however, he thinks physicians should have a lot more information on genetics than they do now.

And, even becoming current with the medical genetics literature may not be sufficient, Robertson warns. He says that the eye of the law doesn't always share the medical view of a test's value.

As an example, he cites a carrier screening test for cystic fibrosis. Both the NIH and the American Society for Human Genetics have ruled that the test, which picks up only about 85% of the genetic mutations responsible for CF, is still too imprecise to justify its cost—which can run into the hundreds of dollars—except for couples with a demonstrated risk of the disease. Nonetheless, couples with a negligible risk are still demanding it, he says. Physicians who counsel against such tests are likely to be in hot water, he cautions.

Fleisher agrees, declaring, "The patient who asks for a test and doesn't get it is the plaintiff I want."

Yet, at least for the next few years, the large-scale demand for genetic screening is expected to be limited to cystic fibrosis, predicts Margery Shaw, M.D., of the University of Texas Health Sciences Center at Houston. Shaw, who is also a lawyer, thinks that once the accuracy of the test improves and the cost goes down, it will be reasonable to test everyone for defects in the CF gene.

This will lead to an increase in medical costs, she acknowledges, but she thinks the added cost is justified because one in 20 Caucasians is a CF carrier. Moreover, if screening programs are successful, she adds, their costs would be balanced by reductions in CF treatment costs.

Michael Conneally, Ph.D., professor of medical genetics at Indiana University School of Medicine, foresees a legal problem of another sort for physicians engaged in

prospective parents, allows these individuals to make informed decisions about having children.

Even though medicine can't cure many of the problems it can identify, that's no reason not to find out. Simply knowing that a familial predisposition for a certain condition

Sources of Information on Clinical Genetics

"Biotechnology Forum Final Report." Program on Technology & Health Care, Department of Community & Family Medicine, Kober-Cogan 218, 3750 Reservoir Road NW, Washington, DC 20007; 202/687-1600. Enclose a check for \$13.50, made out to Georgetown/DNA.

"Genetics in Practice." The March of Dimes Foundation, 1275 Mamaroneck Avenue, White Plains, NY 10605; 914/428-7100.

American Society of Human Genetics, 9650 Rockville Pike, Bethesda, MD 20814; 301/571-1825.

National Center for Human Genome Research, Ethical, Legal, and Social Implications Program, 9000 Rockville Pike, Building 38A, Room 614, Bethesda, MD 20892; 301/496-7531.

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genetic counseling. As possessor of genetic information about a patient, the physician may be implicated in suits to suppress or release that data to interested parties, Conneally says.

Conneally maintains that an employer's right to know a worker's genetic status is superseded by

the patient's right to privacy. However, he thinks it is often necessary that the patient's children, siblings, and other blood relatives have access to genetic information for their own well-being.

He recounts his own experience counseling patients at risk for Huntington's disease. Conneally says he has seen instances in which affected parents postpone informing children of their risk until they have married and started families of their own. Many would have decided not to plan families had they known they were at risk, he notes. This, believes Conneally, represents a conflict between autonomy and malfeasance.

However, confidentiality has yet to emerge as a major legal issue in genetic medicine, according to Harold Edgar, a professor at the Columbia University School of Law. "Even though confidentiality is seen as a problem, there have been very few cases so far," he says.

Yet, confidentiality and many other issues are likely to be decided in the courts during the 1990s. As Alexander Capron, a professor of law at the University of Southern California, put it, there are lots of lawyers out there, and they love to sink their teeth into the kind of issues the new genetics provides.

"The impact of the genome project on the law may be more profound than on biology or medicine," Capron predicts.

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exists can alter the strategy for dealing with the disease. "[Genetics] will play a major role in preventive medicine in the very true sense," says Michels.

"If there is a family history of people with coronary artery disease or heart attack at a young age, it makes sense to see a genetic influence on that disease. It makes sense to monitor for high blood pressure, monitor lifestyle, in an effort to either delay or prevent development of the disease. As we learn more and more about these diseases, there may be ways physicians can intervene in these cases to try to prevent these diseases." Michels cautions, however, that testing should be done only after the patient is fully informed about what medicine can and cannot do, and she emphasizes that nobody advocates testing all people.

Martin Oken, M.D., medical director of the Virginia Piper Cancer Institute at Abbott Northwestern Hospital in Minneapolis, sees genetics as the tool that will, in the future, help oncologists establish a person's risk for a disease in a scientifically sound way. In fact, Oken is hopeful that molecular genetics will provide the big breakthroughs in cancer treatment that more traditional therapies have sometimes failed to provide. "Molecular genetics is emerging as a field that's really going to define oncology," he says. "It's very important to be combining good clinical work with laboratory studies that advance our knowledge of the biology of the disease."

There already exists a DNA blood test to determine whether a person carries the gene for familial polyposis of the colon. Without question, the carrier, if left untreated, will develop the cancer and die of it, says Oken. But now, people in a family with this syndrome can be tested to see if they carry the gene. If they are carriers, they can see a physician, who would give them some very specific advice, possibly even recommending removal of the colon. It's only a matter of time before other genetic tests are developed that would alter the physician's approach to the patient, Oken predicts.

The best way to assess a patient's risk for disease is by taking a family history. LeRoy suggests asking the

following questions: Do you have any brothers and sisters? Are they living and healthy? Do they have children? Are their children living and healthy? Are your parents healthy? Are your parents related? In pediatrics, it's enough to ask about the primary family, says LeRoy. But to assess an adult's risk requires fanning

out to more distant family members—grandparents, aunts, uncles, cousins.

Most family histories will uncover relatives who died of heart disease, diabetes, or cancer in their 60s, 70s, or 80s. That's not what physicians are looking for. They're looking for the family with members who died of coronary artery disease in their 40s, or one loaded with autoimmune disease. Then, said LeRoy, "bells should go off."

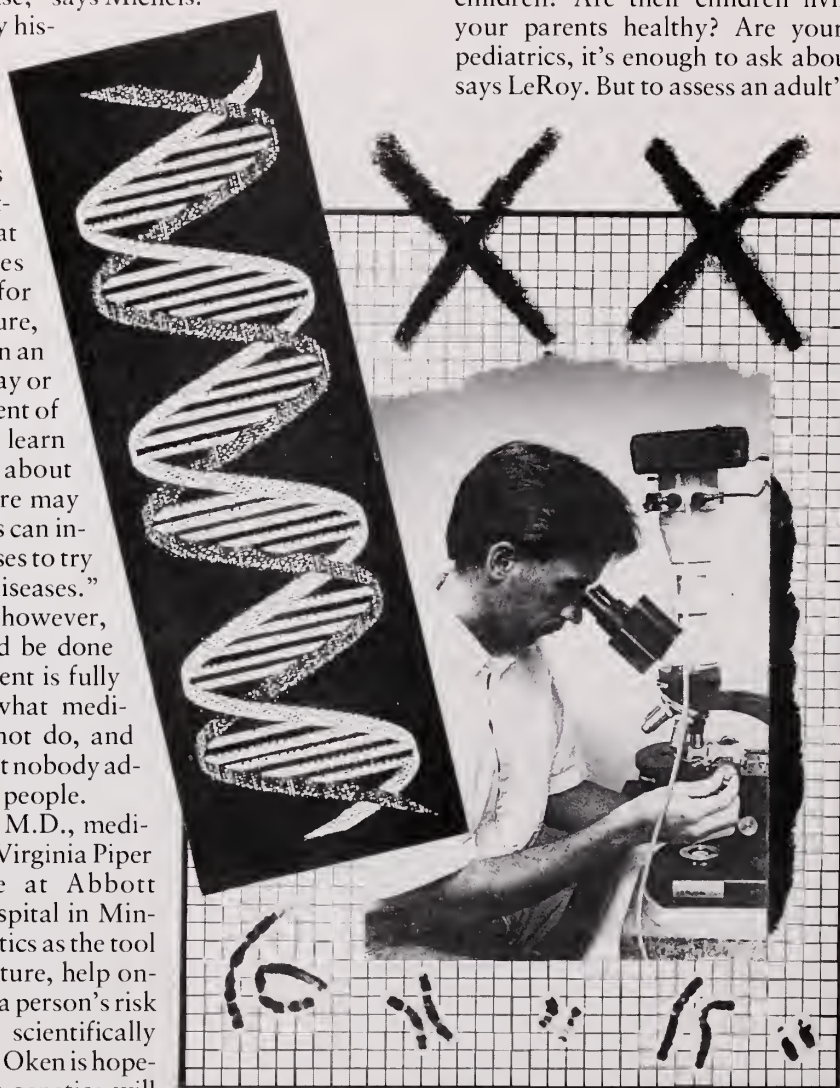
This sounds simple enough, but LeRoy believes not enough physicians are doing it. She speculates that a GI specialist will ask a patient with stomach pain if there's a history of colon cancer in the fami-

ly. But, she adds, "I'm sure they don't ask, 'Do you have heart disease in your family?'"

Genetics challenges physicians to see beyond their specialty—to see the whole patient. "In a funny way, I'm a very fancy family practitioner," says Susan Berry, who is a pediatrician with three years of post-graduate training in genetics.

What happens when the physician suspects a genetic predisposition to some disorder? What tests are available to confirm the suspicion? When do you test? How are the test results analyzed? How do you handle a terrible prognosis, especially when there's nothing you can do about it? These and a host of other questions are going to challenge physicians and society at large, especially as more information is gathered through the Human Genome Project.

Concern over the ethical implications of the genome project are so great, in fact, that for the first time in the history of federally funded projects, money has been



allocated to study the ethical, legal, and social questions raised by the research findings. Three percent of the project's annual budget, or about \$6 million a year, has been set aside to look at how the availability of detailed and sensitive genetic information will affect our personal and family privacy, our medical treatment, insurance coverage, livelihoods, and even our social attitudes.

Responding to concern over the misuse of individuals' genetic information, the American Medical Association's Council on Ethical and Judicial Affairs issued a report in October 1991 on the potential abuse of testing by employers. The council argued that "future unemployment is not an adequate basis for performing genetic tests," because many individuals who carry a gene may never show manifestations of the gene, and if they do, the expressions are variable.

Physicians will not be immune to the ethical dilemmas posed by new genetic discoveries, especially now, when medicine is helpless to do much about so many genetically based diseases. "What do we do when we tell someone who's 20 years old that he's going to have this disease at 45 and die?" asks King. "You can never counsel him completely." Yet, King adds, people want to know. What's more, they often want to know about their children's fate, raising other ethical concerns. Should physicians test children, who, as adults might choose not to know? Knowledge from the tests could alter the family dynamics. It could affect the child's position in the family, how she's viewed, how she's educated.

Today these concerns seem academic, but tomorrow there may be a drug or enzyme to treat a genetic disorder, and then the physician will become more involved, argues Dianne Bartels, administrative director of the Center for Biomedical Ethics at the University of Minnesota. When treatment becomes available, physicians will assume a much greater role in determining whether to do genetic testing and screening, what to test for, and, ultimately, what to prescribe to treat the problem, she predicts.

Undeniably, physicians already are becoming more knowledgeable about genetics, but the field's complexity requires that they lean on university genetics departments and genetics counselors for assistance. "It will be impossible for a private practitioner to know everything there is to know about genetic testing and what genetic treatment is available for every condition. The best that you can know is what your resources are and who can do the legwork for you," LeRoy advises. Geneticists and genetic counselors are prepared to answer such questions as these: Can you test for the disease? How do you test for it? How accurate are the tests? What do the tests cost?

In Minnesota, there are medical genetics departments at the University of Minnesota and the Mayo

"Genetics will play a major role in preventive medicine in the very true sense."

—Virginia Michels, M.D.

Clinic, and there are 10 genetic counselors in the state, in the Twin Cities and Rochester. Genetic counselors also work at genetics clinics in Duluth and St. Cloud as part of a University of Minnesota outreach program. Like LeRoy, they're educated at the master's level in genetics and counseling.

Physicians can stay abreast of the field by reading journals, which are devoting more space to genetics, and they also can take advantage of continuing medical education programs, such as one the University of Minne-

sota is planning to offer later this year. But none of this should replace advice from geneticists.

"Physicians need to understand that the field is moving rapidly and they can't take anything for granted when it comes to patients who have a known genetic disorder," says Karnes. The knowledge of genetic diseases is expanding daily, which means that



treatment available today may be different than treatment available a few years ago. "I want primary care physicians to understand that the geneticists are here to help them interpret this data. ... Sometimes it's even difficult for us, as geneticists, to appreciate the tests as they come out," says Karnes. "That's the challenge of genetics; what is true two or three months ago is not necessarily adequate for today." MM

Miriam Feldman is a Minneapolis free-lance writer.

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The CLIA '88 Final Rule

A Guide to Compliance

Julie A. Gayken, B.S., M.T., and J. Stephen Kroger, M.D.

The final rules implementing CLIA '88 are here at last! It was four years ago that Congress began its debate about regulating all laboratory test sites. Prompted by articles in *The Wall Street Journal* and *The Washington Post* and television reports of deaths resulting from misdiagnosed Pap smears, Congress passed the landmark Clinical Laboratories Improvement Amendments of 1988 (CLIA '88). Intended to regulate all human testing, CLIA '88 affects more than 200,000 testing sites, more than half of which are office laboratories.

Two years after the law was passed, the Health Care Financing Administration (HCFA) published a proposed rule that was so unreasonable it provoked a record 60,000 written comments, most of them from physicians telling HCFA the adverse impact the regulations would have on their ability to care for patients. Stunned, HCFA turned to the Centers for Disease Control (CDC) for technical assistance in developing new regulations. In addition to reading your letters, the CDC convened panels of laboratory experts to advise them about the revised quality standards. The result of this effort was published February 28, 1992, in the *Federal Register* as the CLIA '88 Final Rule.

Regulation Summary

The following summary is derived from the CLIA '88 Final Rule and the March 1992 *COLA Update*, the official newsletter of the Commission on Office Laboratory Accreditation (COLA). We have identified the key issues related to this now-mandatory regulation, and we offer some suggestions for compliance. The Clinical Laboratory Improvement Amendments of 1988 take effect September 1 of this year; inspections are also expected to begin at that time. Enrollment in proficiency testing is required in 1993, with participation required in 1994. Sanctions will not be imposed until 1995. (See Table 1 for a complete timetable.) We have not included information here regarding cytology, since most office laboratories do not read Pap smears.

To Whom Does CLIA '88 Apply?

CLIA '88 applies to anyone who performs testing of human specimens for the diagnosis, prevention, or treatment of disease or health problems. This includes everyone from physicians performing the most basic tests to

those who operate physician office laboratories. The only exceptions are facilities that perform testing for forensic purposes, research labs that do not report patient results, and facilities certified by the National Institute on Drug Abuse to perform only urine drug testing.

States can seek exemption from the federal standards if they have regulations that are equivalent to CLIA. If the federal government grants the exemption, laboratories in these states will be subject to state, rather than federal, standards and fees.

"CLIA '88 affects more than 200,000 testing sites."

Certification

All laboratories that are subject to CLIA must obtain appropriate certification documents. Laboratories that perform only waived tests are eligible for a "waiver certificate." Other laboratories must apply for a "registration certificate," which is valid for up to two years. A laboratory meeting applicable requirements will then be issued either a "certificate" (for laboratories complying with the Department of Health and Human Services program) or a "certificate of accreditation" (for laboratories complying with the DHHS-approved private, nonprofit accreditation programs).

In the next several months, HCFA will decide on the approval of accrediting organizations such as COLA, the College of American Pathologists, and the Joint Commission on Accreditation of Healthcare Organizations.

How to apply for a certificate

HCFA has already sent a questionnaire to over 600,000 laboratories requesting information about testing instruments, methods, menus and number of tests performed, and lab personnel training and experience. From this questionnaire, HCFA expects to identify all labs that must be certified under CLIA. (If you did not receive the questionnaire or did not return it, contact HCFA and ask for form 109.) Next, HCFA will send an application for a registration certificate and a bill for the registration fee. Once a laboratory completes these steps, it is registered under CLIA. It is in compliance with the law and will continue to be paid for Medicare and Medicaid work.

Sometime in the latter part of the year, laboratories and test sites will receive another form and a bill from HCFA, this time for a Department of Health and Human Services certificate or a certificate of accreditation.

Table 1

Timetable for CLIA implementation

Release of Final Rule	Feb. 28, 1992
Registration certificate mailings begin	April-May 1992
DHHS or accreditation certificate mailings	July-Sept. 1992
Complete moderate-complexity analyte list available	July-Sept. 1992
Effective date of registration	Sept. 1, 1992
Proficiency testing enrollment	1993
Proficiency testing begins	Jan. 1, 1994
Sanctions begin for proficiency testing	Jan. 1, 1995
Limited quality control for moderate-complexity labs	Until Sept. 1, 1994

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How is HCFA Classifying Laboratories?

HCFA determined three categories of testing based on complexity of testing methodology: waived tests, tests of moderate complexity, and tests of high complexity.

Waived tests were determined based on criteria that the test systems are simple, stable, and require a minimal degree of judgment and interpretation. Waived tests are cleared by the FDA for home use.

All other test methodologies are categorized as being either moderate or high complexity based on such criteria as necessary knowledge and training required to perform tests, degree of troubleshooting and maintenance needed to perform tests, and the lability of materials.

Waived tests

Eight tests meet the criteria for waiver (Table 2). A "certificate of waiver" will be issued for laboratories performing only these tests. Regulations state that: 1) manufacturers' instructions for performing the test must be followed, and 2) inspections must be permitted for random compliance evaluations or complaint investigations.

Tests of moderate complexity

More than 40 general types of tests or procedures have been categorized as moderate complexity (Table 3). It is estimated that 75 percent of all tests will be classified in this category. A preliminary list of specific test systems, assays, and examinations within these general categories, arranged by analyte, was published concurrently with the regulations in the *Federal Register*. A complete list will be published by the effective date of the regulations. The best way to find out whether a particular instrument or method is in this category is to call the manufacturer.

Tests of high complexity

Certain laboratory subspecialties and more than 50 general tests or procedures have been categorized as high complexity (Table 4).

Proficiency Testing

CLIA has mandated proficiency testing (PT) as a method to externally evaluate the quality of a laboratory's performance. For PT, laboratories will be provided with specimens of known composition to analyze in the same manner as patient specimens. Each laboratory performing tests of moderate or high complexity is required to enroll in an approved PT program in 1993 for all specialties and subspecialties for which it seeks certification. Participation in PT is mandated by January 1, 1994. To allow newly regulated laboratories time to learn the PT process without penalties for errors, these laboratories will not be subject to penalties for unsuccessful PT performance until 1995. (However, if failure is so severe as to suggest that patient health and safety are jeopardized, immediate action will be taken.)

Each PT shipment includes five samples for each analyte or test; laboratories must participate in three such testing events per year. Each must pass two consecutive or two out of three consecutive testing events. An 80 percent pass rate is required in microbiology, diagnostic immunology, chemistry, hematology, immunohematology, and all related subspecialties; exceptions are for ABO and D(RHo) typing and compatibility testing, which require a 100 percent pass rate.

HCFA will impose the following sanctions for PT:

- Failure to enroll: denial or revocation to certificate;
- Nonparticipation in PT event: score of zero;
- Failure to return results to PT program: score of zero;
- Failure to meet required success rates: During the first year, laboratories will be given a chance to correct deficiencies. Beginning September 1, 1995, certification will be suspended for the failed analyte, specialty, or subspecialty for at least six months and until two consecutive PT challenges are passed, and Medicare/Medicaid payments will be terminated for the failed analyte, specialty, or subspecialty;
- Sending samples to or comparing results with another lab: Certification will be revoked for at least one year.

Quality Assurance

Physicians are familiar with quality-assurance programs used in hospitals to monitor patient care. Similarly, CLIA requires every laboratory to have a quality-assurance program to monitor and evaluate the ongoing and overall quality of the laboratory's activities. The CLIA requirements include written policies and procedures for: 1) patient preparation; 2) specimen collection; 3) specimen labeling, preservation, and transportation; 4) corrective actions; 5) use of different testing methods; 6) inconsistent results; 7) personnel problems and corrective actions; and 8) complaints and subsequent investigations.

Quality Control

Each laboratory must establish and follow written quality-control procedures that monitor and evaluate the quality of the analytic testing process of each test method

Table 2

Certificate of waiver tests

Dipstick or tablet reagent urinalysis (nonautomated) for:

- bilirubin
- glucose
- hemaglobin
- ketone
- leukocytes
- nitrite
- pH
- protein
- specific gravity
- urobilinogen

Fecal occult blood

Ovulation test—visual calar comparison tests

Urine pregnancy tests—visual calar comparison tests

Erythrocyte sedimentation rate—nonautomated

Hemaglobin—copper sulfate, nonautomated

Spun microhematocrit

Blood glucose—with monitoring devices cleared by the FDA specifically for home use

Based on MMWR, vol. 41, RR-2, February 28, 1992, page 3.

Table 3

Tests of moderate complexity**Bacteriology**

Primary culture inoculation

Urine culture and colony count kits

Microscopic evaluation of direct wet mount preparations

Isolation and identification (presumptive and/or confirmatory) of aerobic bacteria from throat, urine, cervical, or urethral specimens

Gram stain

Darkfield examination for *Treponema pallidum*

Manual procedures with limited steps and with limited sample or reagent preparation

Manual screening devices for bacteriuria with limited steps and with limited sample or reagent preparation

Automated procedures that do not require operator intervention during the analytic process

Mycobacteriology

Direct acid fast smear

Mycology

Primary culture inoculation

Isolation of yeast with identification limited to *Candida albicans* (excluding semi-automated and semi-quantitative procedures)

Microscopic evaluation of direct wet mount preparations

Microscopic evaluation of KOH preparations

Tests using selective media for the presence or absence of dermatophytes

Manual procedures with limited steps and with limited sample or reagent preparation

Automated mycology procedures that do not require operator intervention during the analytic process

Parasitology

Microscopic evaluation of pinworm preparations

Microscopic evaluation of direct wet mount preparations for the presence or absence of parasites

Manual procedures with limited steps and with limited sample or reagent preparation

Culture devices indicating the presence or absence of *Trichomonas vaginalis*

Virology

Manual procedures with limited steps and with limited sample or reagent preparation

Automated procedures that do not require operator intervention during the analytic process

Immunology

Manual procedures with limited steps and with limited sample or reagent preparation

Automated procedures that do not require operator intervention during the analytic process

Darkfield examinations for *Treponema pallidum*

Chemistry

Manual procedures with limited steps and with limited sample or reagent preparation

Automated procedures that do not require operator intervention during the analytic process

Automated blood gas analyses that do not require operator intervention during the analytic process

Whole blood measurements using test strip meters (excluding glucose monitoring devices cleared by the FDA specifically for home use)

Osmolality measurements

Urinalysis

Microscopic analysis of urinary sediment

Automated urinalysis procedures that do not require operator intervention during the analytic process

Hematology

Automated hematology procedures without differentials that do not require operator intervention during the analytic process

Automated hematology procedures with differentials requiring no operator intervention during the analytic process and no interpretation of a histogram or scattergram

Automated coagulation procedures that do not require operator intervention during the analytic process

Manual white blood cell differentials without identification of atypical cells

Manual hematology or coagulation procedures with limited steps and with limited sample or reagent preparation

Immunohematology

Manual or semi-automated procedures with limited steps and with limited sample or reagent preparation

Automated procedures that do not require operator intervention during the analytic process

Other

Semen analysis for the presence or

absence of sperm

Occult blood in body fluids

Crystal analysis in joint fluid

Viscosity

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Table 4

*Tests of high complexity***Clinical cytogenetics**—all procedures**Histocompatibility**—all procedures**Histopathology**—all procedures**Cytology**—all procedures**Bacteriology**

Isolation and identification of aerobic and anaerobic bacteria from specimens not specified in moderate complexity

Automated or semi-automated procedures requiring operator intervention during the analytic process

Serogrouping and typing

Antigen or toxin test procedures or kits requiring microscopic evaluation

Manual procedures with multiple steps in sample or reagent preparation or the analytic process

Semi-automated nonculture urine screening devices predicting bacteriuria

Mycobacteriology

Concentration, smear, and primary culture inoculation

Isolation and identification techniques

Antimycobacterial susceptibility testing

Manual procedures with multiple steps in sample or reagent preparation or the analytic process

Automated or semi-automated procedures requiring operator intervention during the analytic process

Mycology

Isolation and identification of all fungi not specified in moderate complexity

Identification techniques requiring interpretative skill

Manual procedures with multiple steps in sample or reagent preparation or the analytic process

Automated or semi-automated mycology procedures requiring operator intervention during the analytic process

Parasitology

Concentration or differential staining techniques

Identification techniques requiring interpretative skills

Antigen test procedures or kits requiring microscopic evaluation

Manual procedures with multiple steps in sample or reagent preparation or the analytic process

Virology

Isolation and identification techniques

Antigen test procedures or kits requiring microscopic evaluation

Manual procedures with multiple steps in sample or reagent preparation or the analytic process

Automated or semi-automated procedures requiring operator intervention during the analytic process

Immunology

Manual procedures with multiple steps in sample or reagent preparation or the analytic process

Automated or semi-automated procedures requiring operator intervention during the analytic process

Immunoassay methods requiring microscopic evaluation

Radioimmunoassays

Gel-based immunochemical procedures

Electrophoresis

Western blot

Cell phenotyping and analysis

Procedures requiring cell or tissue culture techniques

Chemistry

Manual procedures with multiple steps in sample or reagent preparation or the analytic process

Automated or semi-automated procedures requiring operator intervention during the analytic process

Blood gas analyses requiring operator intervention

Atomic absorption

Flame photometry

Electrophoresis

Gel-based immunochemical procedures

Radioimmunoassays

Anodic stripping voltammetry

Mass spectrometry

Urinalysis

Automated or semi-automated procedures requiring operator intervention during the analytic process

Hematology

Automated or semi-automated procedures requiring operator intervention during the analytic process

Manual hematology or coagulation procedures with multiple steps in sample or reagent preparation or the analytic process

Manual white blood cell differentials with identification of atypical cells

Manual reticulocyte counts

Manual cell counts

Manual platelet counts

Bone marrow evaluation

Flow cytometry

Hemoglobin electrophoresis

Immunohematology

Manual procedures with multiple steps in sample or reagent preparation or the analytic process

Automated or semi-automated procedures requiring operator intervention during the analytic process

Compatibility testing—includes any of the following when performed in the process of determining donor/recipient compatibility: recipient and donor ABO group/D(Rho) type/special antigen typing, direct antiglobulin test, tests for unexpected antibody detection and identification, and crossmatch procedures

Other

Semen analysis (quantitative)

Eye bank microscopy procedures

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to ensure accurate and reliable patient test results. The regulations contain two sections on quality control: one on general quality-control requirements and another that includes additional requirements for specialties or subspecialties.

Starting September 1, 1992, those instruments, kits, or test systems categorized as moderate complexity that are cleared by the FDA have minimal quality-control requirements. High-complexity and modified tests must be performed following the full quality-control requirements. (See Table 5 for minimum requirements and effective dates.)

The FDA will evaluate whether products meet CLIA requirements for quality control by September 1, 1994. Laboratories using tests of moderate or high complexity that have been cleared by the FDA can follow the manufacturer's instructions for much of the general quality control. Laboratories using tests not cleared in this manner must follow all applicable quality-control rules. However, laboratories will need to determine appropriate procedures and performance criteria for their specific testing.

Personnel

CLIA rules link personnel requirements with the complexity of testing. The requirements differ substantially for personnel who perform moderate- and high-complexity testing and, thus, are defined separately. The

regulations list specific qualifications for the persons who fill these positions. Persons who are qualified may perform the functions of more than one position in either moderate- or high-complexity testing. For example, the same person may function as both the laboratory director and the clinical consultant. In some cases, one person could qualify for and function in all the positions listed.

The education, training, and experience required for each personnel position have been determined as appropriate for the performance of tests of moderate and high complexity; however, these qualifications are intended to be minimum standards. A comment period for the Final Rule may result in some adjustments.

Personnel for laboratories conducting moderate-complexity testing

Qualifications and responsibilities of personnel who perform moderate-complexity testing are specified for the following: laboratory directors, technical consultants, clinical consultants, and testing personnel.

The laboratory director is responsible for the overall operation of the lab and the competency of all personnel. Besides providing an appropriate working environment, the director must see that all tests are performed according to applicable requirements, that quality-assurance and quality-control programs are established, and that the lab is enrolled in proficiency testing.

Most physician directors already possess the neces-

Table 5

Quality-control implementation stages as specified in the regulations for implementing CLIA '88

Date	Requirements
Effective date of the regulation (September 1, 1992)	Moderate-complexity tests cleared by FDA* for in-vitro diagnostic use: - Follow manufacturer's instructions - Prepare procedure manual - Calibrate at least once every six months - Perform two levels of control daily - Perform applicable specialty/subspecialty QC** - Perform remedial action - Document all QC activities High- or moderate-complexity tests developed in-house or cleared by FDA for in-vitro diagnostic use that have been modified by the laboratory: follow all applicable QC rules High-complexity tests: follow all applicable QC rules.
Two years after the effective date (September 1, 1994)	High-complexity tests: follow all applicable QC rules Moderate- and high-complexity tests cleared by FDA as meeting CLIA QC requirements: - Follow manufacturer's QC instructions - Meet regulatory QC requirements that are not met by manufacturer's instructions All other tests: follow all applicable QC rules

*FDA = Food and Drug Administration

**QC = Quality Control

Based on MMWR, vol. 41, RR-2, February 28, 1992, page 10.

Table 6

**Personnel requirements—
Moderate-complexity labs**

Director

1. Laboratory director license if required by state AND
2. Licensed M.D. or D.O. AND certified in anatomic or clinical pathology OR lab training or experience consisting of: one year directing or supervising non-voiced lab OR 20 CME credits in lab practice about director responsibilities (effective February 1993) OR training equivalent to 20 CME credits during medical residency
3. Doctoral degree in laboratory science AND board certified OR one year experience directing or supervising non-voiced lab
4. Master's degree in lab science AND one year lab training or experience AND one year of supervisory experience
5. Bachelor's degree in lab science AND two years' lab training or experience AND two years' supervisory experience

Technical Consultant

1. License, if required by state AND
2. Licensed M.D. OR D.O. AND certified in anatomic or clinical pathology OR lab training or experience consisting of: one year laboratory training or experience in designated specialty/subspecialty in areas of service
3. Doctoral or master's degree in laboratory science AND one year laboratory training or experience in designated specialty/subspecialty in areas of service
4. Bachelor's degree in lab science AND two years' laboratory training or experience in designated specialty/subspecialty in areas of service

NOTE: "training or experience" can be acquired concurrently in specialties and subspecialties.

Clinical Consultant

1. Licensed M.D. or D.O. OR
2. Qualified laboratory director (see "director" column)

Testing Personnel

1. Licensed by state, if required
2. Licensed M.D. or D.O.
3. Doctorate, master's, bachelor's, or associate degree in laboratory science
4. High school graduate or equivalent AND 50 weeks' military training as medical lab specialist OR documentation of training appropriate to testing performed, TO INCLUDE:
 - specimen collection, labeling preparation, etc.;
 - implementation of laboratory procedures;
 - performance of assigned tests;
 - execution of preventive maintenance, troubleshooting, calibration;
 - knowledge of reagent stability and storage;
 - implementation of quality-control procedures;
 - knowledge of factors influencing test results;
 - validation of patient test results with quality control before reporting

High-complexity labs

Director

1. Laboratory director license if required by state AND
2. Licensed M.D. or D.O. AND certified in anatomic or clinical pathology OR one year laboratory training during medical residency OR two years' experience directing or supervising high-complexity lab
3. Doctoral degree in laboratory science AND board certified OR (until February 1994) two years' laboratory training/experience AND two years' experience directing or supervising high-complexity lab

Technical Supervisor

Specific qualifications are required for each specialty or subspecialty.
FOR ALL SPECIALTIES/SUBSPECIALTIES EXCEPT FOR HISTOCOMPATIBILITY AND CYTOGENETICS:

1. Licensed M.D. or D.O. AND certified in anatomic AND clinical pathology

FOR SUBSPECIALTIES OF BACTERIOLOGY, MYCOBACTERIOLOGY, MYCOLOGY, VIROLOGY, PARASITOLOGY:

1. Licensed M.D., D.O. AND certified in clinical pathology OR

- one year training or experience in high-complexity microbiology with a minimum of six months in the appropriate subspecialty
2. Doctoral degree in laboratory science AND one year training or experience in high-complexity microbiology with a minimum of six months in the appropriate subspecialty
3. Master's degree in laboratory science AND two years' training or experience in high-complexity microbiology with a minimum of six months in the appropriate subspecialty
4. Bachelor's degree in laboratory science AND four years' training or experience in high-complexity microbiology with a minimum of six months in the appropriate subspecialty

FOR DIAGNOSTIC IMMUNOLOGY, CHEMISTRY, HEMATOLOGY, RADIO-BIOASSAY:

Some educational/experiential requirements EXCEPT no six-month subspecialty requirement.

FOR PATHOLOGY AND ITS SUBSPECIALTIES, CYTOLOGY, HISTOPATHOLOGY, CYTOGENETICS, IMMUNOHEMATOLOGY: There are specific requirements for each specialty or subspecialty (see regulation).

Clinical Consultant

1. Licensed M.D. or D.O. OR
2. Qualified laboratory director

General Supervisor

1. Licensed by state, if required
 2. Qualified director OR
 3. Qualified technical supervisor OR
 4. M.D., D.O., doctorate, master's, or bachelor's degree in lab science AND one year lab training/experience in high-complexity testing OR
 5. Associate degree AND two years' lab training or experience
- FOR BLOOD GASES:
If not qualified above,
6. Bachelor's or associate degree in respiratory therapy AND one or two years' training or experience
- FOR CYTOLOGY, SEE REGULATION

Testing Personnel

1. Licensed M.D. or D.O.
2. Doctoral, master's, bachelor, or associate degree in laboratory science
3. Previously qualified as technologist
4. (Until February 1997) same as moderate complexity
5. Bachelor's or associate degree in respiratory therapy

sary qualifications. Personnel who have operated a laboratory doing moderate-complexity testing for one year meet both the director and technical consultant requirements. Those doing high-complexity testing in their medical specialty, such as hematology or rheumatology, and who have had training in residency to do so, qualify to direct a high-complexity laboratory in that specialty. Directors qualified under state law to operate a laboratory before publication of CLIA remain qualified, regardless of the new requirements.

The technical consultant is responsible for the technical and scientific oversight of the laboratory. The technical consultant must be a doctor of medicine or osteopathy or have a doctoral, master's, or bachelor's degree in one of the sciences with laboratory training or experience in each of the specialties or subspecialties for which he or she is providing consultation. The laboratory director may function as the technical consultant in those specialties or subspecialties in which he or she has the requisite training or experience. Specific responsibilities include selection and verification of testing, development of quality-assurance and quality-control procedures, evaluation of testing personnel's competency, and identification of training needs.

The clinical consultant serves as the liaison between the laboratory and its clients in matters related to reporting and interpreting results. The clinical consultant must be a doctor of medicine or osteopathy or a board-certified, doctoral-level scientist.

The testing personnel (the persons responsible for specimen processing, test performance, and reporting of results) must have, at a minimum, a high-school diploma

and the appropriate training as specified in the regulations, or have an associate degree or above in one of the sciences. Testing personnel are required to demonstrate their testing skills before performing tests on patient specimens and thereafter to ensure their continued competency in patient testing.

In addition to the previously listed personnel, high-complexity laboratories must also employ at least one person who can function as a technical supervisor and a general supervisor. The general supervisor must provide on-site direct supervision of testing personnel and must be accessible to these individuals (see Table 6).

Inspections

Beginning September 1, 1992, waiver labs will receive random, unannounced inspections; moderate- and high-complexity labs will receive unannounced inspections every two years. Inspectors must be allowed access to all areas and all records.

Unannounced inspections will also take place when HCFA has substantive reason to believe testing is presenting imminent and serious risk to human health and when it needs to evaluate public complaints.

Fees

The CLIA statute requires that the costs for administration and enforcement of its regulations be completely covered by user fees. Laboratories will be charged a fee for registration, for issuance of a certificate, for inspections, and for any complaint investigations or sanctions. In general, fees are determined by annual testing volume and number of specialties (see Table 7 with schedules A

Table 7

Fees

Schedule of labs	No. tests performed annually	No. specialties	Registration fee ¹	Waiver certificate ¹	Accreditation certificate ¹	HHS user fee ²	Complaint investigation ²	Sanction/hearing ²	Revised certificate ¹	Accreditation validation survey ²
A-Low vol.	<2K	*	\$100	\$100	\$100	\$300	*	*	\$50	*
A	5K-10K	<=3	\$100	\$100	\$100	\$840	\$52	\$280	\$50	\$42
B	<10K	>=4	\$100	\$100	\$100	\$1120	\$595	\$315	\$50	\$56
C	10K-25K	<=3	\$100	\$100	\$100	\$1400	\$665	\$350	\$50	\$70
D	10K-25K	>=4	\$350	\$100	\$100	\$1645	\$735	\$385	\$50	\$82
E	25K-50K	*	\$350	\$100	\$100	\$1890	\$840	\$420	\$50	\$95
F	50K-75K	*	\$350	\$100	\$100	\$2135	\$910	\$455	\$50	\$107
G	75K-100K	*	\$350	\$100	\$100	\$2380	\$980	\$490	\$50	\$119
H	100K-500K	*	\$600	\$100	\$100	\$2625	\$1050	\$525	\$50	\$131
I	500K-1M	*	\$600	\$100	\$100	\$2870	\$1120	\$560	\$50	\$144
J	>1M	*	\$600	\$100	\$100	**	**	**	**	**

*Not defined

**Based on complex formula—see *Federal Register*

¹ Fixed fees

² Estimated fee; this will vary from state to state

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through J). Fixed fees include \$100 for a waiver certificate, \$100 for an accreditation certificate, and \$50 for a revised certificate. Because HCFA must negotiate the cost of inspections (compliance fees) with each state, compliance fees, complaint inspection fees, and revisit fees will vary from one state to another. HCFA has computed average fees, which are presented in Table 7. Be aware, however, that fees in a given state may differ from these. No information on state-specific fees will be available until HCFA completes its negotiations.

Sanctions

HCFA may impose sanctions against laboratories for failure to comply with the regulations. In cases posing immediate harm to patients or personnel, sanctions will be imposed prior to a hearing; in all other cases, sanctions will not be imposed until a hearing is conducted. These sanctions may include suspension of testing certain analytes or specialties; suspension of Medicare/Medicaid payments; civil money penalties of up to \$10,000 per violation; or suspension, limitation, or revocation of certification.

HCFA has stated it will allow previously unregulated laboratories (such as physician office labs) the opportunity to correct deficiencies found during the first inspection unless they pose an immediate threat.

COLA-CLIA '88 Accreditation Option

The Commission of Office Laboratory Accreditation (COLA) is a voluntary, nonprofit education and accreditation organization for the office laboratory. Founded by the American Medical Association, the American Academy of Family Physicians, the American Society of Internal Medicine, and the College of American Pathologists, it provides physicians the opportunity to perform a self-inspection using COLA criteria prior to inspection. The physician can gain up to 15 hours of Category II CME credit through the American College of Physicians for this review.

The CLIA '88 Final Rule is very complex and is expected to cause great confusion. However, laboratories that have already gone through the COLA accreditation process will find they are in an excellent position to move into the post-CLIA era. First, the experience completing the COLA accreditation process will render transition into CLIA regulation much less onerous. Second, COLA will continue to serve as a conduit for information flow from HCFA's regulatory program to COLA laboratories, thus assuring these labs receive timely information. Finally, as soon as possible, COLA will be applying for deeming authority from HCFA, making COLA accreditation an attractive alternative to federal certification.

For more information on COLA, contact: Commission on Office Laboratory Accreditation, 8701 Georgia Avenue, Suite 610, Silver Spring, MO 20910; 301/588-5882.

Copies of the CLIA '88 Final Rule may be obtained by writing: Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402-9325;

202/783-3238. Ask for the *Federal Register*, February 28, 1992, stock no. 069-001-00042-4. Enclose a check or money order for \$3.50 for each copy ordered. **MM**

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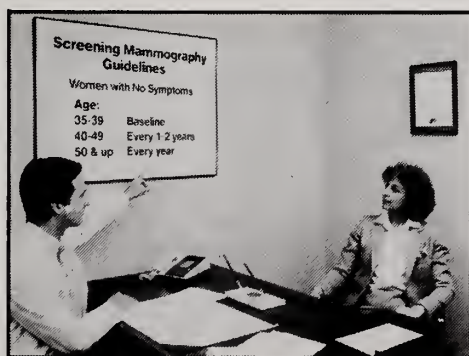
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Examples:

1. Benson RC Jr. Laser photodynamic therapy for bladder cancer. *Mayo Clinic Proc* 1986;61:859-64.
2. Guttormson NL, Bubrick MP. Mortality from ischemic colitis. *Dis Colon & Rectum*, to be published.
3. Chatterjee SN. Use of GOR-TEX grafts as vascular access procedure for chronic hemodialysis. Abstract of a paper submitted to the European Society for Artificial Organs Eighth Annual Meeting, Copenhagen, August, 1981.
4. Thompson NW. Thyroid and parathyroid. In: Welch KJ, Randolph JG, Ravitch MM, et al., eds. *Pediatric Surgery*, 4th ed. Chicago: Year Book Medical, 1986: vol 1, 522-33.

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The Revolution in Clinical Genetics

Practical Applications

Pamela S. Karnes, M.D.

ABSTRACT

Recent advances in genetics directly affect family physicians. Many diagnostic tests are currently available to screen the fetus for malformations and genetic diseases, and gene therapy is slowly becoming a reality. This article discusses some of the screening techniques available, including chromosome analysis, ultrasound, and DNA studies.

As anyone who reads a newspaper can attest, tremendous advances have been made in the diagnosis, evaluation, and treatment of genetic diseases. Of the estimated 50,000 to 100,000 human genes, the chromosome locations of more than 1,500 have been mapped. The entire DNA sequence of more than 600 human genes is known. With this explosion of knowledge, a multitude of new terms and diagnostic tests have forced their way into our vocabularies. This article briefly describes some of the more common diagnostic tests and treatment modalities available as well as the limitations and rationale for their use.

Genetic Screening and Pregnancy

Sampling techniques

With respect to genetic issues, pregnancy poses a greater sense of urgency than it did in the past. Many diagnostic tests are now available to screen the fetus for malformations and genetic diseases, but most must be accomplished early in the pregnancy if all management options are to be available to the parent(s).¹ Chromosomes can be analyzed using a chorionic villus sample (CVS) early in the pregnancy (eight to 12 weeks) or using amniocentesis a few weeks later (14 to 18 weeks). Both CVS and amniocentesis have advantages and disadvantages. The CVS can be performed earlier in the pregnancy, but it entails a higher risk of miscarriage (about 1/100 in experienced hands), and there is potential that contaminating maternal cells could affect the interpretation of chromosome results. Amniocentesis is a safer procedure; the risk that it will cause a miscarriage is about 1/400 in experienced hands. The risk of maternal cell con-

tamination is also much lower than with CVS. However, a potential disadvantage of amniocentesis is that it is usually performed later in the pregnancy.

Fetal blood can also be sampled via ultrasound-guided percutaneous needle puncture of the umbilical artery. The risk of the procedure is dependent upon the operator but about comparable to CVS. Fetal skin and liver can be biopsied using fetoscopy with ultrasound guidance. Because the latter three techniques entail significant risk to the fetus, they require expertise. In considering these various tests, the physician should remember that each prenatal situation is unique, and tests that are indicated in one couple may not be in another couple. The earlier the parents are evaluated in a pregnancy, the greater the options for prenatal diagnostic procedures.

Chromosome techniques (prenatal and postnatal)

The quality of prenatal and postnatal chromosome studies has improved significantly over the past 10 years, and small chromosome deletions and translocations are now detectable that previously might have been missed. Refinement of other diagnostic techniques, such as breakage studies (used in the diagnosis of ataxia-telangiectasia), and fragile-site studies (used in the diagnosis of fragile X syndrome) have occurred. Fluorescent in situ hybridization (FISH) allows metaphase chromosomes to be labeled with fluorescent probes specific for different chromosomes. This technique and higher-resolution chromosome banding have allowed small pieces of previously unidentifiable chromosome material to be characterized. As an example, suppose a fetus or infant is found to have addi-

Table 1

Some currently available DNA linkage tests

Hemophilia A

Familial adenomatous polyposis

Spinal muscular atrophy

Multiple endocrine neoplasia I

Multiple endocrine neoplasia II

Adult polycystic kidney disease

Citrullinemia

Ornithine transcarbamylase deficiency

Phenylketonuria

Retinoblastoma

tional chromosome material on the end of one of the number 5 chromosomes. This observation would imply that the fetus is partially trisomic for a small amount of chromosome material and would raise concern about fetal malformation and mental subnormality. Without knowing the origin of the added material, it is not possible to determine what types of malformations to expect. Using FISH, it may be possible to label and relabel the abnormal number 5 chromosome with probes until the "additional" chromosome material is highlighted. Knowing from which chromosome the added material came, the clinical geneticist can review comparable cases from the literature. She can then make more specific predictions and testing recommendations for the fetus or infant. In the past, when an individual was found to have a small additional piece of unidentified chromosome material, the counseling could not be specifically adapted to the situation.

Imaging and alpha fetoprotein

In the hands of a skilled operator, high-resolution ultrasound can be very effective in detecting such fetal

malformations as congenital heart defects, neural tube defects, renal malformations, and often even cleft lip.² Amniotic fluid or maternal serum alpha fetoprotein (AFP) can be used to screen for open neural tube defects and ventral wall defects. The specificity of AFP is relatively low because there is overlap between the distribution of AFP levels in normal pregnancies and in those with a neural tube defect. A number of other factors can affect maternal serum AFP, such as maternal race, weight, and twin gestation. Maternal serum AFP is being offered in conjunction with unconjugated estriol and human chorionic gonadotropin levels to screen for Down syndrome. Abnormal results should prompt consideration of high-resolution ultrasound and measurement of amniotic fluid alpha fetoprotein and acetylcholinesterase levels. Chromosome analysis can be considered as well.

DNA studies

A variety of DNA studies can be performed using chorionic villus cells, amniotic fluid cells, leukocytes, or tissue cells when there is a family history of a particular genetic disorder.³ Many DNA tests require two to four weeks to perform, and, thus, should be considered as early as possible when prenatal diagnosis is a possibility.

Many DNA studies are performed using restriction fragment length polymorphisms or RFLPs, which are actually benign polymorphisms or variations in the human genome. Many RFLPs that reside near human genes of interest have been identified and characterized. A physician must consider a number of factors when using RFLP to screen for a genetic disorder. First, the test is an indirect one; it does not directly detect an abnormality in a person's DNA. Rather, based upon a unique pattern of RFLP markers, it allows a particular chromosome or chromosome region to be tracked through a family. For this test to be applicable, the clinical diagnosis must be unequivocally established in at least two individuals in a family, and the paternity and maternity of family members must be certain. Finally, the test requires

that the disease in question be due to a mutation at one gene locus, and that a mutation at another locus cannot create a phenocopy or identical phenotype. As an example, RFLP analysis cannot be used prenatally or presymptomatically to diagnose tuberous sclerosis because, genetically, the disease is not a single condition. Mutations on several different chromosomes are capable of causing the condition we clinically recognize as tuberous sclerosis—a phenomenon referred to as genetic heterogeneity.

RFLP analysis is performed as follows. DNA is extracted from amniocytes or chorionic villus cells in the case of prenatal diagnosis, or leukocytes in the case of postnatal diagnosis. The DNA is cut into distinct fragments using restriction enzymes. The DNA is then separated on a gel by fragment size. The DNA fragments can be tested by exposing them to a probe (a small piece of labeled DNA that is derived from a particular chromosome region). The pattern exhibited by a series of probes from one chromosome region can be used to track the passage of a particular piece of DNA through a family. RFLP analysis is useful when we know the general location of a gene but do not know its exact sequence. This test allows us indirectly to track a gene through a family. RFLP DNA analysis is available for disorders such as Huntington's disease, neurofibromatosis type 1, and hemophilia A (Table 1).

A number of direct DNA tests are available for disorders such as Duchenne muscular dystrophy, fragile X mental retardation syndrome, myotonic dystrophy, cystic fibrosis, and hemophilia B (Table 2). These tests are designed to look for one or more commonly recognized abnormalities or mutations in the gene in question. These tests can be performed on an individual whether he has a family history of the disorder or not. The limitation to some of these tests, such as the cystic fibrosis test, is that not all mutations in the gene have been identified. Mutations may occur in any one of the many exons in a gene (recall that exons are the coding regions of the gene, interspersed by noncoding regions). Currently, our

technology is not good enough to allow an entire gene to be sequenced cost effectively. Therefore, only the exons that have been shown to carry the greatest percentage of mutations in a particular gene are usually sequenced. For example, in cystic fibrosis, a recessive disorder, the most common mutation occurs in the codon for amino acid 508. This mutation accounts for about 70% of cystic fibrosis mutations.⁴ Many DNA diagnostic laboratories, therefore, only sequence DNA to detect this mutation. Some laboratories are able to detect another six to seven mutations, which together are thought to account for about 85% of cystic fibrosis mutations. Still, some individuals with cystic fibrosis may have none of the commonly detectable mutations. Their mutations most likely reside in other exons. This is a significant limitation to the current mutation analysis approach. It is hoped that as technology improves it will become easier and more cost effective to sequence large amounts of DNA and, thus, to screen whole genes for mutations.

Gene Therapy

Gene therapy may sound like a distant possibility but, in fact, several humans have received genes to correct genetic defects. Many obstacles remain before this treatment modality becomes routinely feasible. The manner in which the technique may work is as follows. Suppose there is a gene that encodes an important enzyme. When a mutation occurs in the gene, the enzyme is produced in insufficient quantities. This, in turn, leads to build-up of the enzyme's substrate in the patient's organs. The first step in gene therapy is to sequence the entire coding region for the gene in question (the exons). Next, one must create a laboratory system that can reproduce this gene sequence millions of times and then create a carrier system that would enable the gene to be carried into the patient's cells. Finally, one must devise a way to incorporate the recombinant gene into the genome of the person's cells. For some disorders, this task is going to be much easier than for others. Very large genes may be extremely

Table 2

Some currently available DNA mutation tests

Alpha 1 antitrypsin deficiency

Cystic fibrosis

Duchenne/Becker muscular dystrophy

Fragile X syndrome

Lesch-Nyhan disease

Myotonic dystrophy

Sickle cell disease

21-hydroxylase deficiency

Gaucher disease

Familial amyloid polyneuropathy

Mitochondrial myopathies

difficult to reproduce and introduce into cells. It may be easier to achieve gene expression in some types of cells as opposed to others. As an example, it may be very difficult to introduce genes into neurons; whereas, it may be relatively easy to introduce genes into blood leukocytes. For some lysosomal storage disorders, plans are already underway to replace mutant lysosomal enzyme genes in bone marrow cells that have been harvested. Once the bone marrow cells are shown to express the enzyme, they could then be given back to the patient by transfusion. The bone marrow cells would then populate the patient's bone marrow with cells capable of expressing the gene and producing the protein in question. Although this task sounds relatively easy in the case of a lysosomal disorder, it is actually quite difficult to introduce whole genes into the human genome and ensure that they remain in place.

Conclusion

It is likely that the recent important advances in genetics will directly af-

fect the family physician. When confronted with a pregnant couple or individual with a family history of a genetic disease, it would be prudent for the physician to ask these questions:

1. Has the gene for this condition been located?
2. Is there a clinically available genetic test for this condition?
3. Does the couple want to know if their fetus is affected?

Unfortunately for geneticists, the answers to the first two questions change almost weekly, making it difficult to keep up with the literature in this area. Our scientific knowledge of genetics has expanded much more rapidly than our understanding of its impact on human beings. The choices available to individuals with a family history of genetic diseases or an abnormal fetus are more difficult than ever before, and it may be some time before we understand the impact of this technology on individuals and society. **MM**

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REFERENCES

1. Chervenak FA, Isaacson G, Mahoney MJ. Advances in the diagnosis of fetal defects. *N Engl J Med* 1986;315:305-7.
2. Hill LM, Breckle R, Gehrking WC. The prenatal detection of congenital malformations by ultrasonography. *Mayo Clin Proc* 1983;58:805-26.
3. Phillips JA. Gene diagnosis: detection of genetic disorders by DNA analysis. *Birth Defects* 1987;23:259.
4. Zielenski J, Markiewicz D, Rininsland F, Rommens J, Tsui LC. A cluster of highly polymorphic dinucleotide repeats in intron 17b of the cystic fibrosis transmembrane conductance regulator (CFTR) gene. *Am J Hum Genet* 1991;49:1256-62.

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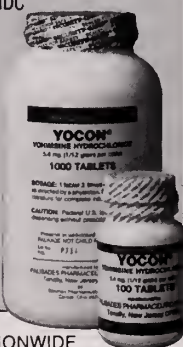
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References:

1. A. Morales et al., New England Journal of Medicine: 1221. November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

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Health Care Antitrust Woes

Does the State Legislature Hold the Solution?

Quentin T. Johnson, J.D.

Many health care professionals believe that without collaborative action by providers there can be no health care cost containment that will not adversely affect quality of care. This raises troubling antitrust issues.

Recently, there has been much talk about the need for state legislation to reduce or eliminate the antitrust risks arising out of health care providers' collective action on utilization review and cost control. Advocates of legislative relief point to the Mankato and Alexandria situations as proof of the need. They believe health care providers incur significant antitrust risk anytime they take any collective action to control utilization or costs.

This article explores the kind of state legislation that might be required to shield providers from antitrust liability when they act collectively to control costs and utilization. Merely obtaining exemption from Minnesota's antitrust law would not be sufficient. Only legislation that allows the state to regulate control of utilization and costs will do the job. Providers will have to determine whether eliminating antitrust risks is worth the sacrifice.

These contrasting approaches to legislative antitrust relief are exemplified by two bills introduced in the most recent session of the Minnesota Legislature. An example of the Minnesota law exemption approach is H.F. 2100, which would exempt certain agreements from Minnesota's antitrust law. Any agreement non-profit hospitals, physicians, and other health care providers enter into to avoid duplication, if reasonably likely to result in cost savings to consumers, would be exempt. The bill does not, however, establish any state regulation of such agreements.

An example of the state regulation approach is the gargantuan omnibus health care act, one version of which is S.F. 2604. Two sections of that bill are of particular relevance. One section establishes state

“Are the benefits of eliminating antitrust risk worth the loss of freedom involved in regulation?”

and local health care commissions or boards under the commissioner of health and gives the commissioner broad powers to regulate many facets of health care delivery and financing. Another section requires the commissioner of health to establish procedures to sanction arrangements that might otherwise violate state and federal antitrust laws but that nevertheless advance the bill's general objectives. It also specifically exempts such “sanctioned” arrangements from the Minnesota antitrust law.

Both bills were pending as this article went to press.

Is a State Antitrust Law Exemption Enough?

Some providers believe it is sufficient to create a new exemption from the state's antitrust law because most of the recent high-profile problems have been state law enforcement matters and because they believe federal antitrust enforcers will not show up in Minnesota.

The latter assumption is a serious misconception. The fact that neither the Federal Trade Commission (FTC) nor the Antitrust Division of the U.S. Department of Justice has recently commenced any litigation against local providers gives no assurance that they won't in the future. Indeed, the federal antitrust enforcement agencies are believed to have conducted several investigations of area providers in the very recent past.

In January of this year, an FTC commissioner said in a speech to a bar group that the FTC has great interest in health care joint ventures, particularly in what she referred to as “sham” preferred provider organizations and independent practice associations. (These “sham” organizations and associations would include those that fail to have sufficient risk sharing or fail to provide new or more efficient services.)

More important, providers who violate federal antitrust law would remain vulnerable to suits by private parties for triple damages and injunctive relief plus legal expenses. For example, third-party payers who claim that an illegal agreement among providers has increased their payments to those providers could sue under federal antitrust law, even if the providers are completely exempt from the state's antitrust law. The plaintiff's legal fees in a litigated case are likely to be well into six figures.

Let's assume that the Minnesota Legislature passes a law that completely exempts health care providers from the state's antitrust law. The local hospital and all the physicians in Bedrock, Minnesota, then agree jointly to negotiate (no opt-outs) with Cut-Price HMO. The HMO wants a bigger discount than the providers will give. Providers refuse to negotiate with the HMO individually. The

HMO then sues all the providers on group-boycott and price-fixing theories under federal antitrust law. Assuming the HMO could show damages, it would probably have a good claim against the providers under federal antitrust law.

Alternatively, assume that Cut-Price HMO comes to terms with the Bedrock Hospital and physicians, and it has no complaints about the deal. But suppose a Bedrock general surgeon thinks he could have negotiated higher fees from the HMO had it not been for the group negotiation process. He sues the HMO, his fellow physicians, and the local hospital. Would he have a claim under federal antitrust law?

This situation is similar to the *ChoiceCare* litigation in Cincinnati, in which a \$32 million judgment was rendered against a physician-controlled HMO and various individuals related to it. The case was settled before a decision was handed down from an appellate court, so we do not have the Court of Appeal's view on this subject. Legislation that merely exempts state health care providers from the state antitrust law affords no protection against a replay of *ChoiceCare*. Therefore, a "forget the feds" strategy is fraught with peril.

Federal 'State Action' Exemption

Under appropriate circumstances, a state legislature can pass a law that, in effect, prevents federal antitrust law from applying to activities governed by state law. This often comes as a surprise to those not familiar with antitrust law. The key is "under appropriate circumstances."

The Supremacy Clause of the U.S. Constitution bars any state from passing a law that preempts a federal law, unless Congress authorizes the states to opt out. In 1943, the Supreme Court ruled in *Parker v. Brown* that when Congress passed the Sherman Act (the principal U.S. antitrust law) it did not intend to prohibit the states from enacting legislation that substitutes state regulation for competition. The court said that federal antitrust law does not apply to conduct that is in accordance with a state

regulatory framework actively supervised by governmental officials.

First, it must be understood that the *Parker* case does not mean that the state Legislature can simply pass a law that says federal antitrust law will not apply to some groups in Minnesota. For example, if the Minnesota Legislature passed a law that declared price-fixing among physicians to be lawful in Minnesota without creating some sort of state regulatory framework for physician fees, then federal antitrust law would still apply to price-fixing among Minnesota physicians. The conflict between the federal antitrust law and the state law would be resolved in favor of the federal law because of the U.S. Constitution's Supremacy Clause.

Essential Elements of State Action Exemption

When *can* state legislation create a federal antitrust exemption? To qualify, the law must clearly articulate and affirmatively express state policy to replace competition with state regulation of the conduct in question, and the conduct in question must be appropriately supervised by government officials.

The law must clearly outline the conduct it intends to regulate and therefore exempt. For example, to control costs, providers might be authorized to establish and operate "health care coalitions," "foundations for medical care," or "health care associations" with the power to require or prohibit certain kinds of health care activities on the part of their member providers. These organizations would also have the authority to require all health care providers or association to comply with the organization's cost-containment measures and to set the prices that association or coalition members must charge. Those procedures, practices, and prices would have to be reviewed and approved by a state regulatory body, such as the Department of Health, or perhaps by some newly established agency, such as a state health care cost-control board.

Such legislation is conceptually similar to laws that permit "rate

bureaus" among common carriers to set rates that state regulators must then approve.

Another possibility is the approach adopted in S.F. 2604, which does not specifically authorize any particular type of provider arrangements but does clearly grant a state agency the power to authorize and regulate conduct that would otherwise violate state or federal antitrust laws.

State Intention to Substitute Regulation for Competition

The first requirement can easily be met. All the Legislature need do is pass a law authorizing some type of conduct and state that it intends to replace the antitrust laws with state regulation. Courts have been quite liberal in finding legislative intent to supplant competition with regulation, even when the Legislature has not been so explicit about its purpose. Meeting this part of the state action formula is easy.

There could be little question, for example, that S.F. 2604 to some extent intends to replace competition with regulation. The fact that it leaves the details to a state regulatory body does not matter.

State Supervision Requirement

The second requirement may be less palatable to the health care community. The state action doctrine does not apply unless the conduct covered by the state legislation is actively supervised by the state. But how much supervision is required and by whom?

The courts have been quite liberal about whom it allows to supervise such action. Clearly, a state agency not itself under the control of the group will meet existing legal standards. For example, the Department of Health clearly would qualify.

The more difficult issue is how much and what sort of state supervision will suffice to create antitrust immunity. At one extreme, it is clear from cases decided by the U.S. Supreme Court in the past 10 years that merely permitting providers to establish and "post" or "file" their fees and practices with a state regulator will not suffice.

The regulatory governmental agency must have the ability to regulate the substance of private conduct covered by the statute, not merely the procedures to be followed by the regulated parties. Because the Oregon Board of Medical Examiners only had the power to review the procedural aspects of physician peer review and not the substance of those decisions, the U.S. Supreme Court held in *Patrick v. Burget* that peer review in that state was not exempt from federal antitrust law.

So, for example, if new Minnesota legislation authorized the creation of local health care provider associations to control utilization and to set fees, the governmental regulatory agency would have to be authorized to determine whether the utilization controls and prices were fair and reasonable (or whatever the statutory standard happens to be), not merely whether the associations' adoption of the utilization controls and fees was procedurally correct.

How active must regulatory supervision be? The FTC has taken a strong interest in this question. Its position is that the governmental regulatory agency must actually consider the anti-competitive consequences of the regulated activities. Thus, the FTC has found state supervision of common carrier rate setting to be adequate when the regulators have reviewed financial information that supports the rates, but inadequate when the agency did not "look behind" the requested rates to determine if they were reasonable.

In contrast, however, most courts have not closely reviewed the extent to which regulatory bodies have exercised their regulatory powers. Several courts have established a presumption that a "comprehensive" regulatory scheme established by state statute is some evidence that the state agency administering the statute is actually following it. Clearly, the courts do not generally wish to become involved in making decisions about how good a job state regulators are doing. Therefore, the courts will only rarely find regulatory supervision inadequate when the following conditions are met: 1) a state's statute authorizes a regulatory body

to supervise some private conduct, 2) the legislature has funded and staffed the regulatory body, and 3) the agency is doing something. In short, there must be some active substantive regulation, but it need not be very intrusive.

The U.S. Supreme Court is expected to rule soon on a case that raises this issue, and that case may have a significant impact on whether regulation is a desirable alternative to the existing state of affairs.

Conclusion

If health care providers press for state legislative relief from antitrust risk associated with collaborative cost containment, they would be well advised not to settle for a simple exemption from the Minnesota antitrust law. Antitrust risk from federal law would remain, leaving providers in a position no more secure than the one they're in now. Only state legislation that establishes some form of state regulation will provide sufficient immunity from federal antitrust laws.

The ultimate question is whether the benefits of eliminating antitrust risk are worth the loss of freedom involved in regulation. Once the regulatory genie is out of the bottle, it's hard to say what it will do or who will control it.

MM

Quentin Johnson is an officer and shareholder of Fredrikson & Byron, practicing in the areas of commercial and antitrust law. He deals with many service and manufacturing industries (including health care) on marketing, licensing, and distribution issues in the United States and internationally.



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Sexual Harassment in the Workplace

How to Recognize, Investigate, and Prevent the Problem

By Lucinda E. Jesson, J.D.

Anita Hill, Clarence Thomas, and the Senate Judiciary Committee have moved from prime-time television, but the issue they raised—sexual harassment—remains center stage for most employers. As senators, professors, and other experts debated what constitutes sexual harassment, a nation of employees was given a picture of sexual harassment much more vivid than that painted by a personnel policy statement. Heightened awareness of sexual harassment has made employers aware of the importance of recognizing, investigating, and preventing such complaints.

There are two distinct types of sexual harassment claims. One is "quid pro quo" sexual harassment, in which an employee is required to submit to the sexual advances of a supervisor as a condition of obtaining some job benefit. A supervisor pressuring an employee for dates in exchange for a promotion or threatening to fire an employee who does not grant sexual favors are examples of quid pro quo sexual harassment. The second type of sexual harassment claim is "environmental" harassment, in which an employee's tangible job conditions may not be affected, but the employee is subjected to sexual innuendoes, touching, vulgarity, or propositioning by coworkers or supervisors. This type of harassment becomes illegal when it alters the conditions of employment and creates a hostile or abusive work environment. The parameters of what constitutes environmental harassment are much harder to define, particularly when the complaining employee has engaged in sexually explicit discussions in the past. It is critical for employers to recognize and investigate sexual harassment claims of either type.

Recognize Harassment Complaints

Recognizing sexual harassment complaints sounds easy, but it is not—particularly when an employee raises

"Recognizing
sexual harassment
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easy, but it
is not."

a hostile environment complaint. Most employees do not raise these issues formally. Many may not even use the phrase "sexual harassment" but may, instead, complain of sexual jokes, inappropriate pictures, or profane language. Whenever these types of concerns are mentioned to a supervisor, they merit immediate attention. Employers should not wait to take action until an employee files a formal grievance or a "real" charge with the Minnesota Department of Human Rights or the Equal Employment Opportunity Commission.

Investigate Complaints Promptly

To create a better working environment and to avoid legal liability for harassment, employers must respond to a harassment claim with a prompt, thorough investigation. If the investigation determines corrective action is necessary, remedial steps must be taken. Although each investigation necessarily differs, the following points are particularly important:

- The investigation must be

prompt. Ideally, it should be initiated shortly after receipt of the complaint, preferably within the first few days. It is particularly important that the complainant be interviewed as soon as possible to gather information and to alleviate his or her concern that nothing will be done as a result of the complaint. If the complainant is supervised by or works closely with the alleged harasser, the employer should consider separating the employees or providing one with a leave of absence during the investigation.

- A neutral investigator should conduct the investigation. Whenever possible, someone outside the employee's department should conduct the investigation, preferably someone with a background in human resources. If the individuals involved are in particularly sensitive positions, such as high-level or human resources positions, legal counsel or another outside investigator should assist in the investigation. It may be helpful to have at least one investigator who is of the same sex as the complainant.

- The investigation should include separate meetings with the complainant, the alleged harasser, and other witnesses. The interview with the complainant is the most important part of the investigation. The interviewer must make the complainant feel that he or she is being taken seriously and must assure the employee that no retaliation will occur because of the complaint. On the other hand, the interviewer should be careful not to take sides and should remain neutral. During the interview, the investigator should inquire about all details of the complaint; for example, who observed the conduct? did the employee ever ask the alleged harasser to stop? and did the employee ever initiate sexually oriented conversations?

In some cases, the complainant may not want any adverse action taken against the alleged harasser and may not want the interviewer to proceed with the investigation. The employer who abides by these wishes is at risk. Once notified of harassment, an employer must follow through. It may be appropriate for the interviewer to tell the complainant that he or she must confront the alleged harasser to end the harassment or the interviewer may take steps to continue the investigation. Shortly thereafter, the interviewer should check back with the complainant to find out whether the alleged harassment has continued and whether the complainant has confronted the harasser. If not, the interviewer should proceed with the investigation.

Concomitantly, the interviewer should be sure that the alleged harasser feels that his or her side of the story will be investigated and considered and that confidentiality will be maintained to the greatest extent possible. The alleged harasser should understand that the employer has a duty to conduct a thorough investigation and that disciplinary action will be brought if warranted. The employer should let the alleged harasser know the specifics of the complaint and should ask for responses to each factual allegation.

Both the complainant and the alleged harasser should be asked to identify any witnesses whom they would like to be interviewed. These witnesses should be interviewed, as should be certain other staff, such as the alleged harasser's and complainant's supervisors. These interviews must be conducted carefully so as not to spread rumors regarding the alleged harassment.

The person conducting the investigation should take careful notes regarding the interviews. These notes should be factual, not editorial. The conclusions reached following an investigation should consider such factors as the interviewees' credibility, corroborating testimony, documentation, and the employee's past behavior.

• Employers must take appropriate follow-up action. At the end of

the investigation, the investigator should reach a conclusion, even if the conclusion is that no definitive decision can be made as to whether harassment occurred. The employer's usual discipline policy should be considered, but any corrective action should be individually determined. Numerous factors should be considered, including the relative organiza-

"Employers should not wait to take action until an employee files a formal grievance."

tional positions of the harasser and complainant, the extent and nature of the harassment, the complainant's behavior, previous complaints, and the longevity of the harassment.

If corrective action is deemed unnecessary, this conclusion should be fully documented. No action should be taken against the complainant unless there is strong evidence that he or she made the complaint in bad faith.

If it is simply not possible to reach a definitive conclusion as to whether or not the harassment occurred, this should be documented and both the complainant and the alleged harasser should be informed that it was impossible to make a definitive decision. If appropriate, the alleged harasser should be monitored. In some circumstances, the investigator may find that inappropriate conduct took place but it did not reach the level of sexual harassment. In these situations, the employer should consider corrective and preventive actions, such as probation or training.

In addition to taking actions against the alleged harasser, employers may want to re-disseminate a strongly worded sexual harassment policy and offer sensitivity training on sexual harassment matters to all employees, particularly managers and

supervisors. Removal of the involved employees from close working (or reporting) relationships may also be appropriate.

• Dissemination of information about the investigation and the results of the investigation must be handled carefully, protecting confidentiality whenever possible. The complainant and the alleged harasser should be informed of the investigation, and the results should be put in the alleged harasser's personnel file, or in the complainant's file if the charge is found to be made in bad faith. The only other employee who should be informed is the alleged harasser's supervisor, unless the complaint was not valid and the supervisor was unaware of the complaint. In most cases, employees who were interviewed need not be informed of the results. Employers should guard against the natural tendency to want to explain what happened to those who knew about the investigation.

Prevention of Sexual Harassment

It is crucial that employers have an express policy and grievance procedure addressing sexual harassment claims. To be effective, the sexual harassment policy should:

- be a written policy that is distributed and re-distributed to employees regularly;
- define and express strong disapproval of sexual harassment, showing that management is alert to employees' concerns;
- be discussed and reviewed with all employees;
- call for immediate investigation of any complaint and discipline of any offending employees;
- establish a grievance procedure that provides employees with the opportunity to file a complaint with an employee other than an offending supervisor and that offers protection against retaliation; and
- ensure confidentiality of complaints as much as possible.

If you are an employer, keep your eyes and ears open. If sexually explicit language or pictures are commonplace, take action. Do not wait for a complaint. Instead, talk to offending

employees and begin training sessions. A complete policy and a prompt, thorough investigation help eliminate the employer's liability to the complaining employee and diminish the chance of a defamation or wrongful termination claim by the alleged harasser. Even more fundamentally, these steps create the atmosphere necessary for a productive workforce.

MM

Lucinda Jesson is a partner in Oppenheimer, Wolff & Donnelly's Minneapolis office, where she specializes in employment litigation and counseling and other business litigation. She handles both individual and class-action lawsuits involving race, sex, pregnancy, disability, and marital status discrimination claims as well as numerous common law claims asserted in the employment setting. During the past five years, she has also been an adjunct instructor at the William Mitchell College of Law in St. Paul and the University of Minnesota Law School in Minneapolis.



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Where HealthRight Went Wrong

Thomas A. Stolee, M.D.

As I write this column, it is actually mid-April, and I am preoccupied with the so-called HealthRight legislation, which will be law by the time you read this. HealthRight claims to be a health care access act, but clearly it is primarily a health care cost-control act and only secondarily an access program. Because HealthRight does not mandate health insurance, many people currently uninsured, particularly younger and lower-risk people, will continue to go without, thereby increasing the community rate for the rest. This, in turn, will decrease the policy's attractiveness so that the access problem will continue to be unsolved while state control will be entrenched. Many people have missed this point.

Along with these concerns, I had real problems with the legislative process that resulted in this bill and was disappointed with the reaction of some Minnesota physicians.

We knew that a group of seven legislators and a representative from the governor's office were working on a compromise between our MMA proposal and four bills: the Health Care Access Bill (S.F. 2/H.F. 2 from 1991), the HMO Council bill, Gov. Carlson's bill, and the Insurance Federation bill. We all felt that a working compromise was possible using the best points from the five proposals. However, the "compromise," which was suddenly announced at 4:30 p.m., March 9, contained language that was not in any of the five proposals, including provisions for taxing health care providers and for making Medicare assignment mandatory.

On March 10 at 3 p.m., we received the 124-page document, and the bill's first legislative hearing was set for three hours later. On March



"HealthRight claims to be a health care access act, but it is primarily a health care cost-control act."

11, the MMA's board and its legislative committee held an emergency meeting to review the bill with staff, set priorities, and develop strategies. The MMA staff and board went into full gear, and for the next two weeks, I saw much more of the MMA staff and officers than I did my wife or my partner. The MMA board met again on March 14 and decided to oppose the bill as written. Much of the bill was constructive, but parts would clearly be detrimental to health care delivery in the state.

Obviously, there was a lack of democratic process at the Legislature as well as a lack of timely, well-researched testimony. Although this legislation will create enormous problems for providers, our views were not given much weight in the equation, even though we stood shoulder to shoulder with the hospital organizations and Medical Alley.

It was not only the Legislature that was dysfunctional. Some physi-

cians also had a thalamic, rather than cortical, reaction to the bill, and several called me and other MMA officers and staff to express their strong disfavor, inferring that the fault was ours. Instead of properly directing their concerns toward the lawmakers, some threatened to quit the MMA. With only the Minnesota Medical Association fighting the physicians' battle, it's hard to understand why they would pull the rug out from under our feet. Unfortunately, my own effectiveness diminished because I had to spend a lot of time defusing my colleagues' anger and trying to redirect their energy.

Fortunately, most physicians came through with the support we needed. Many did a tremendous job with the public and with their legislators. By March 19, I felt we were making headway, and I was all the more heartened on March 31, when nearly 500 physicians arrived at the state Capitol to express their concerns about the bill. At the same time, however, I was frustrated that one of our specialty groups had testified in support of the bill before reviewing it with MMA legal counsel, lobbyists, and officers. This lack of solidarity haunted us many times and was used against us by our opponents.

As you know, one of my major goals as president is to see legislation enacted that will provide reasonable, society-supported, meaningful health care access to all Minnesotans. HealthRight, which usurps physician-patient decision making, does just the opposite. It threatens to close hospitals, drive physicians from the state, and, ultimately, decrease health care access in Minnesota. **MMA**

People and Places Making Medical News

People

Teacher of the Year Award

St. Francis/Mayo Family Practice Residency of La Crosse, Wisconsin, named Frank Bures, M.D., Teacher of the Year. Bures is a dermatologist at Winona Clinic in Winona, Minnesota, and is also a new member of the *Minnesota Medicine* Advisory Committee. He has consulted with Family Practice Residency and has lectured at St. Francis since 1979. He is also a consultant to the Interstate Medical Center in Red Wing, Minnesota, Skemp Clinic in La Crosse, and Vernon Memorial Hospital in Viroqua, Wisconsin.

JCAHPO Commissioner

Brian Younge, M.D., of Rochester, Minnesota, is one of six commissioners appointed to the Joint Commission on Allied Health Personnel in Ophthalmology from its member organizations. Younge replaces Robert L. Stamper, M.D., as representative of the American Ophthalmological Society. Younge is a consultant in ophthalmology and neuro-ophthalmology at the Mayo Clinic.

AAOS Board

Edward V. Craig, M.D., a Minneapolis orthopedic surgeon, has been elected to the board of directors of the American Academy of Orthopaedic Surgeons. Craig is an associate professor in the Department of Orthopedic Surgery at the University of Minnesota. He is on staff at the University of Minnesota Hospital and Abbott Northwestern Hospital and is a consultant at the Minneapolis Veterans Administration Hospital.

Health Advisory Group Appointees

Marlene E. Marschall, Minnesota commissioner of health, has named appointees to two advisory groups that deal with the regulation of health-related occupations in the state. The Respiratory Care Practitioner Advisory Council, a new group, and the Physician Assistant Advisory Council advise the state Board of Medical Practice on the regulation of physician assistants and respiratory care practitioners.

Appointees to the Respiratory Care Practitioner Advisory Council include Edward Didier, M.D., of Rochester, and Ian Gilmour, M.D., of Minneapolis, who represent physicians on the council. Cecilia Harrington, St. Paul, and Lillian Warren Lazenberry, Edina, will represent the general public. Bernard Gilles of Rochester, Robert Lee of St. Paul, and Tracy Weseloh of Grand Rapids will represent respiratory care practitioners. Didier, Lazenberry, Lee, and Weseloh will serve through January 2, 1995, and the others will serve through January 2, 1996.

The two appointees to the Physician Assistant Advisory Council are Mark Helgeson of Parkers Prairie, who is replacing Vicki Jones as the physician assistants' representative, and Betty McCollum of North St. Paul, who will represent the general public. Their office terms run through January 2, 1996.

Abbott Nursing VP Receives Award

Julianne Morath, vice president of Nursing at Abbott Northwestern Hospital, and a team of colleagues from New England were recipients of this year's national Thelma Schorr Award for Innovation and Nursing Education and Staff Development.

While working as vice president for patient care and chief of

nursing at Roger Williams General Hospital in Rhode Island, Morath helped establish the Office for Nursing Research Enhancement at the University of Rhode Island, with goals of centralizing support services, providing research information, and promoting the development of scientific strategies to improve patient care. Morath and her colleagues received the Thelma Schorr Award for their ability to mobilize the skills and teaching abilities of their staff and to design a model of innovation and collaboration. They received the award at the National Nursing Staff Development Meeting recently in Miami, Florida.

Acting HCFA Administrator

Health and Human Services Secretary Louis W. Sullivan, M.D., appointed J. Michael Hudson acting administrator of the Health Care Financing Administration. Hudson has been deputy administrator since 1990 and was previously director of public policy analysis at Coopers and Lybrand, an accounting firm. Gail Wilenski, Ph.D., who has been HCFA administrator since February 1990, moved to the White House March 9 as senior health adviser.

New AMA Family Medicine Journal Editor

Marjorie A. Bowman, M.D., M.P.A., has been appointed editor of the *Archives of Family Medicine*, the first new scientific journal the American Medical Association has launched in 65 years. Bowman, professor and chair of the Department of Family and Community

Medicine, Bowman Gray School of Medicine of Wake Forest University in Winston-Salem, North Carolina, will be the second woman to serve as chief editor of an AMA specialty journal. Katherine R. Boucot, M.D., was chief editor of *Archives of Environmental Health* from 1960 through 1970.

Bowman currently serves as associate editor of the *Year Book of Family Practice* and is on the editorial boards of *American Family Physician*, *Female Patient*, and the *Journal of Medical Practice Management*. She has been an author and reviewer for numerous scientific journals, including *JAMA*, *Annals of Internal Medicine*, and the *Journal of Medical Education*.

Places

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Mayo Opens New Pregnancy Unit

Mayo Clinic in March announced the opening of the latest addition to the Mayo Perinatal Center, the Special Care Pregnancy Unit. The unit will provide health care for women who have complications that require hospitalization during pregnancy.

"The goal is to have a dedicated unit for women who are at risk of early delivery to be monitored so they can deliver a healthy baby," says Paul Ogburn, M.D., Mayo Clinic perinatologist and director of Maternal-Fetal Medicine. Mayo Clinic perinatologists and obstetricians provide continuous care and monitoring of the unborn baby and mother during pregnancy.

Previously, women who were at high risk of premature delivery were cared for in the same unit as other women having normal deliveries. Providing a special care unit not only enhances the medical care the patient receives, but also provides a better psychological atmosphere, says Ogburn.

Mayo Health Letter Wins Award

For the third consecutive year, the *Mayo Clinic Health Letter* has been selected as a Top Ten Winner in the 1991 National Consumer Education Materials contest sponsored by the Food and Drug Administration (FDA) and the National Coalition for Consumer Education. More than 150 contestants from across the country competed for the award.

"The *Mayo Clinic Health Letter* was selected for its delivery of meaningful educational messages for consumers on important health issues," says Alexander Grant, FDA associate commissioner for consumer affairs.

Mayo Incinerator Plan Protested

The Mayo Foundation's \$10.6 million plan to build the state's largest medical incinerator is being met with protest from some Rochester residents. Mayo says its old incinerator, which has been in use for years, is too small and doesn't satisfy air quality rules, so it began plans to build the new incinerator five years ago.

In February, the Minnesota Pollution Control Agency studied Mayo's new incinerator plan and found that emissions from the new plant would slightly exceed the state's standards for cancer risks, primarily because of dioxins, mercury, PCBs, and sulfuric acid from burning plastics and other packaging. In March, Mayo officials offered to add more pollution-control gear to the burners, which they said would reduce emissions to a level between 10 and 100 times below that given off by incinerators equipped only with scrubbers.

Opponents say that's not good enough. They are asking Mayo to avoid burning and rely on sterilization of infectious waste, the latest method of handling the problem. A new plant in St. Paul uses a steaming process to sterilize waste from several hospitals in the state. Opponents contend that whatever waste must be burned, such as

radioactive materials and human and animal parts, could be taken to Olmsted County's incinerator. Mayo is investigating use of sterilization but will still need a burner, says Jeff Steiner, the engineer overseeing Mayo's project.

North Memorial Plans Women's & Children's Center

North Memorial Medical Center unveiled plans March 19 for the Twin Cities' first medical facility dedicated exclusively to serving women and children. The center is currently under construction within the North Memorial Medical Center complex and is scheduled to be complete in June.

The center was developed as a direct result of the tremendous response and success of the hospital's current women's education and membership program and feedback from marketing focus groups. It will feature an atmosphere created to address the emotional, spiritual, and social needs unique to women and their children. It will include atypical patient rooms designed to promote the nurturing aspect of a patient's own home and amenities such as "High Tea" served daily to give women a chance to share experiences and "Spa On a Cart," which will offer a variety of therapeutic options such as massage therapy, manicures, and make-up. The center will also house an extensive library stocked with the latest health publications, articles, pamphlets, and videos, and a coordinator will be available to answer questions, provide counseling, and act as an ombudsman. For women who have just delivered babies, a free baby-care video will be available, as will a special hot line for new moms to call with questions during their newborn's first six weeks at home.

Park Nicollet Ridgedale Clinic Relocates

Park Nicollet Medical Center's Ridgedale Clinic staff members packed up their stethoscopes, gauze, and medical equipment March 27 and moved to a new building near the Carlson Center in Minnetonka. The new clinic, renamed the Carlson Clinic, is located just off the Carlson Parkway exit of I-394, at 15111 Twelve Oaks Center Drive in Minnetonka. The 45,000-square-foot, three-story building with adjacent parking ramp, has triple the number of patient rooms that were available in the old location.

"We had completely outgrown our Ridgedale Clinic because of growing patient needs in the western suburbs," said Joseph W. Mitlyng, Park Nicollet's executive vice president and chief operating officer.

Red Cross Revises Donor Rules

Removing the age limit for giving blood is one of several changes the Red Cross has made in its guidelines for who can and cannot donate blood. Under the new rules, which took effect March 16, the upper age limit of 75 no longer exists, allowing anyone 17 years or older to give blood.

The new guidelines require that all prospective donors know the exact name of any prescription medication they may have taken within 30 days. Potential blood donors who know the purpose of their medication, but not the name, will not be allowed to give.

Persons who have had a heart attack or cardiovascular conditions in the past but who are now symptom free, have no restrictions on physical activities, and do not take any heart medication can now give blood. Also, the weight minimum has been relaxed, from 110 pounds down to 105. Persons who have had cancer are now eligible to give blood, provided the cancer has not recurred in five

years and the treatment did not involve chemotherapy.

The changes are being made in all 52 of the Red Cross blood programs as part of a transformation program that aims to create more uniform standards for the way blood is collected, tested, and distributed.

The Memorial Blood Center of Minneapolis plans to retain its age limit of 75 and its weight requirement at 110 pounds, although it occasionally makes exceptions.

Companies Halt Breast Implant Business

Roseville, Minnesota-based Bioplasty Inc. announced in March that it has halted exports of its silicone gel-filled breast implants. The announcement came just after the *Wall Street Journal* published an article about the company's continued sale of the implants, even though the Food and Drug Administration issued a voluntary moratorium. Bioplasty also withdrew FDA applications to test and market a variety of new products.

Bioplasty reported a net loss of \$4.37 million in its second quarter, compared with new earnings of \$423,833 for the same quarter last year. The company blamed halted sales of its silicone-filled breast implants and the establishment of a reserve fund for future returns, inventory reduction, and possible legal requirements for the loss. In a press release, the company said legal matters covered by the reserve fund include the proposed settlement of a 1991 shareholder lawsuit for cash and warrants totaling \$3.3 million.

Dow Corning Corp. announced in March that it is no longer in the silicone gel implant business, but that it will try to license the company's patents and other technology to other companies or simply make them available to the public. The company's chief executive, Keith McKennon, said that the company will not abandon the estimated 750,000 women, including 450,000 Americans, who

have received the company's implants in the past 30 years. The company has set aside \$10 million for safety research and has offered to pay up to \$1,200 to women who want their implants removed but can't afford it.

McKennon said Dow is leaving the implant business because the product has lost money five out of the past seven years. He said it is not a concession to those who insist the product is unsafe.

Socioeconomics

Wellstone Offers Health Access Bill

Sen. Paul Wellstone, D-Minn., proposed in March a national health care plan similar to Canada's system. Under the plan, doctors and hospitals would still operate privately, and patients could choose their physicians. Care would be covered through a state-run insurance system, and doctors and hospitals would be reimbursed using pre-set fees and budgets. The bill is a companion to H.R. 1300, introduced in the House by Rep. Marty Russo, D-Ill.

"Increasingly, voices from around Minnesota and America are demanding fundamental, not incremental, reform of our health care system," Wellstone said. Several unions, consumer groups, and some health associations have endorsed the bill. The American Medical Association opposes changing to a Canadian system, as does the insurance industry.

The bill would guarantee comprehensive benefits to all Americans through a single-payer system funded by the federal government and administered at the state and local levels. It would preserve the current system of medical providers, including doctors, hospitals, clinics, and HMOs. The General Accounting Office has estimated that imple-

menting a Canadian-style health system in the United States would cost about \$64 billion, but it discovered that nearly \$67 billion could be saved in administrative expenses.

Sen. Dave Durenberger, R.-Minn, was quoted in a Minneapolis-based *Star Tribune* article as saying, "It is hard for me to imagine where the sponsors of this bill get the confidence that putting American health care in the hands of government is going to make it more efficient, more compassionate, and more innovative."

Three Physician-Hospital Groups Settle Antitrust Case

Three organizations that represent physicians and the St. Cloud Hospital, St. Joseph's Medical Center in Brainerd, and Douglas County Hospital in Alexandria have settled with the state after Attorney General Hubert H. Humphrey III accused them of organizing to boycott two of the state's largest HMOs and of illegally fixing prices. They have agreed to pay a \$200,000 penalty and provide \$1.1 million in free care for the uninsured and underinsured over the next five years.

Scot Hutton, M.D., president of the organizations and a specialist in internal medicine and gastroenterology in St. Cloud, said the groups never discussed competitive pricing and never tried to fix prices. He said they agreed to the fine because it would cost less than fighting the accusation in court and because they would provide much more than the \$1.1 million in free care even without the agreement.

Humphrey said that, in the mid-1980s, the groups organized a boycott of PHP (now Medica) and Blue Plus (a Minnesota Blue Cross and Blue Shield affiliate). As a result, PHP and Blue Plus "were largely forced out of central Minnesota by doctor and hospital groups which were formed to control and protect the doctors' and hospitals' profits," he said.

The three organizations are St. Cloud Area Health Associates, Central Minnesota Health Care Alliance, and Central Minnesota Physicians Inc.

Minnesota HMOs Report Record Profits

The state's 10 health maintenance organizations reported record profits of more than \$76 million in 1991. Medica accounted for almost half the total. Profits go into the HMOs' reserves since these organizations are, by law, nonprofit. State law requires HMOs to have reserves equal to one month's operating costs and health insurance companies to have reserves equal to two months' costs. The HMOs emphasized that most of their 1991 profits came from interest on their reserves.

Duluth Opens Health Access Office

Several Duluth organizations are sponsoring a Health Care Access Office to help low-income people with questions about access to health care. "There are so many programs out there. People don't know how to proceed," said Tenley Ireland, coordinator. "We're here so that people in different medical situations will have a place to turn." During its first few days open, the office already had clients ask for help filling out papers, setting up appointments, and finding the right programs. The services are free.

The office, with an annual budget of \$71,000, is a joint demonstration project of nine Duluth organizations: St. Mary's and Miller Dwan medical centers, St. Luke's Hospital, the Duluth Clinic, North Star Physician's Plan, Northland Medical Associates, the Ordean Foundation, the Duluth Community Health Center, and BOND (Broadbased Organizing a Newer Duluth).

MCHA Considers 30 Percent Increase

The Minnesota Comprehensive Health Association, operated by Blue Cross and Blue Shield of Minnesota, has proposed a 30 percent increase in its premium rates July 1 in response to a possible \$28 million loss this year. The association provides health insurance to people who cannot otherwise purchase it because of pre-existing conditions. As *Minnesota Medicine* went to press, the association board was scheduled to make a final recommendation in April, which would then be sent to Commerce Commissioner Bert McKasy for a final decision.

Up to 15 percent of the 30,000 policyholders will be forced to drop coverage if the proposal is approved, according to an organization representing the policyholders.

Innovations

Mayo Researcher Repairs Aneurysm without Surgery

Douglas Nichols, M.D., an interventional neuroradiologist at Mayo Clinic, reported in March that he has used an experimental nonsurgical technique to repair brain aneurysms in nine patients since August.

During the procedure, Nichols slips a catheter into the patient's groin, and then, using an X-ray to guide the way, he manipulates the catheter through the arteries to the carotid artery in the brain. When the catheter reaches the aneurysm, he slides tiny platinum-covered coils, which are connected to a wire, through the catheter to the aneurysm. When the coil is in the right location, he uses a tiny burst of electricity to sever the wire. The coils plug the aneurysm by causing blood clots to form, preventing blood from reaching the weakened wall. The coils and clots appear to keep the artery from bursting or leaking. Mayo is one of 10 centers testing the investigational procedure.

Patients whose aneurysms are repaired in this way spend about 48 hours in the hospital after the procedure, compared with about 10 days after a surgical operation to repair aneurysms.

The coils were developed by two researchers at UCLA and engineers from Target Therapeutic, a small company in Fremont, California.

Mayo Tests Arthritis Drugs

Mayo Clinic has begun testing new medications that may slow or stop the progression of rheumatoid arthritis. The drugs, monoclonal antibodies, offer a more targeted approach to treatment of this elusive disease, which affects the entire body, causing stiffness, pain, swelling, and destruction of joints. About 2 million people in the United States have this chronic, debilitating disease.

"We're not sure exactly what causes the disease," says Eric Matteson, M.D., the study's principal investigator. "We do know certain cells are involved in the process. If we can modify these cells and reduce their number, we hope to be able to control the disease and make patients feel better."

The new medications being tested at Mayo Clinic and several other centers nationwide target t-lymphocytes, white blood cells that appear to be directly involved in the disease process. "These new medications will act ... like 'smart bombs,' specifically eliminating those cells that are believed to be most involved. We hope that these medications will be more safe and effective for patients who live with rheumatoid arthritis than currently available slow-acting drugs," says Matteson. About 20 Mayo Clinic patients are involved in the studies, which are scheduled for completion in 1993.

PSA Test Detects Prostate Cancer

Prostate-specific antigen (PSA) is proving a useful way to detect prostate cancer, and, as a result, many doctors are giving patients the simple blood test as part of routine physicals and cancer screening.

The American Cancer Society might recommend that all men over 50 get the test annually. In a five-year study, the society is checking 3,000 men annually for the cancer through PSA testing, ultrasound, and rectal exams. In the study's first two years, 136 cancers were detected, 40 percent of which would have been missed without PSA testing.

New Cystic Fibrosis Treatment Shows Promise

A new drug called deoxyribonuclease, or DNase, is the first to successfully break up the mucus that is a major hazard of cystic fibrosis, according to a study by the National Heart, Lung and Blood Institute published in the March 19 *New England Journal of Medicine*. The drug is a copy of a natural human protein and is administered in an aerosol spray breathed through the mouth.

Genentech, the drug's maker, plans to seek permission to sell DNase in early 1993. It is being tested on 900 people at 50 hospitals across the nation. Patients in the study have noticed a 10 to 20 percent improvement in their lung function with no apparent side effects.

Medical Research

Study: Oat Bran Cuts Cholesterol

A review of research done on oat bran shows that a healthy serving each day can lower cholesterol levels by 3 to 4 percent. Nineteen studies were reviewed, most of which had suggested that oat bran lowers cholesterol, but some had suggested otherwise. According to the review, which was presented at the annual meeting of the American Heart Association, people who

ate three grams of oat bran a day lowered their blood-cholesterol levels by about six points.

"Consumption of oats will effect a modest—but not insignificant—reduction in blood cholesterol," said Cynthia Ripsin of the University of Minnesota, the study's principal author.

Study: Any Dioxin Risks Health

Government scientists have warned that dioxin poses serious health threats at any level of exposure. Extremely small amounts of dioxin can alter humans' reproductive and immune systems, according to Linda Birnbaum, the leading dioxin researcher for the U.S. Environmental Protection Agency.

Just a year ago, Birnbaum had believed low levels of dioxin were harmless, but since then there has been an explosion of understanding, she said. The amounts that cause severe damage are higher than those commonly found in the average American, she said, but the levels that can affect developing offspring are "very, very, very low."

The EPA will formally announce its findings in June in a draft report that will be used to set pollution limits, said Peter Preuss, coordinator of the dioxin reassessment at the EPA.

AIDS Update

Minneapolis Dentist Fined for Refusing to Treat Patient

A Minneapolis dentist has been fined \$15,000 for refusing to treat a patient with the AIDS virus. Donald Clausen, D.D.S., is the first dentist in Minnesota to receive such a fine. The case is based on the Minnesota Human Rights Act, which makes it illegal to discriminate against people because of a disability.

The patient, James B. Busby, had told Clausen of his HIV status

in 1989. Clausen claimed he made a routine referral when he told his receptionist to cancel Busby's appointment for a regular teeth cleaning in September 1990 and refer him to the University of Minnesota. Clausen had referred two other HIV-positive patients to the university as well.

An administrative law judge ordered Clausen to pay Busby \$10,000 for mental anguish and suffering and \$5,000 in civil penalties.

People with the AIDS virus have told state health officials they have difficulty getting dental care. In a 1991 state Health Department survey, 21 percent of AIDS patients interviewed said they were unable to find a dentist willing to treat them.

HIV-Infected Health Worker Sues Care Facility

A New Brighton man, who is believed to be the only health care worker in Minnesota to become infected with HIV through patient contact, has sued a Minneapolis nursing home and the maker of a needle he used to withdraw blood from a patient. Thomas R. Acree, who accidentally stuck himself with the needle after withdrawing the patient's blood, filed suit in Hennepin County in April 1991 claiming that the needle was defective and that Bryn Mawr Health Care Center had inadequate procedures for disposing of hazardous materials. The suit also says he was unaware the patient had AIDS. Acree was working for Smith-Kline Beecham Clinical Laboratories at the health care center.

Acree reported the incident to the Minnesota Health Department, which investigated and concluded Acree had been infected with the virus from the needle stick. Named in the suit are Med-Care Associates Inc., parent company of Bryn Mawr, and Becton, Dickinson and Co., the needle manufacturer.

Stephen Cooper, an attorney representing the Bryn Mawr center, said that while Bryn Mawr is

sympathetic to Acree's situation, its administrators do not believe they could have done anything to prevent the accident. According to

Cooper, the nursing home was unaware of the needle stick until it received a letter about the suit from Acree's attorney in January. **MM**



K. James Ehlen, M.D.
Chairman, CEO Medica

NETWORK QUALITY AND PRACTICE GUIDELINES

As I pointed out last month, Medica's value to purchasers is its collaboration with participating physicians and facilities to manage toward quality outcomes. That distinguishes us from insurance companies that merely sell benefit packages.

Medica believes that well-managed health care is inseparable from quality patient care. Our commitment to quality is an integral part of the Plan's mission and operations.

Medical management and quality assurance are integrated operationally in two significant ways.

Our Medical Policy Council (MPC) develops practice guidelines and medical policies as reference and educational resources for participating physicians in their daily work. Quality assurance activities are carried out through the Quality Assurance Committee (QAC), which is committee of the board of directors. Both the MPC and QAC are physician-directed.

These two collaborative efforts support Medica's obligation to assure that quality health care is accessible to its members, and to allow use of measurable criteria to identify and continually address quality and service-related problems.

Increasingly, Medica will use practice guidelines set by MPC and monitored by QAC to enhance credentialing of the physicians and other care providers in our network.

We must assure purchasers that the Medica provider network delivers necessary, appropriate and effective medical care.

MEDICA

A Calendar of Continuing Medical Education Courses

Provided through the MMA Medical Education Subcommittee on CME Resources. For assistance with scheduling meetings or for information on future medical meetings and CME courses, please contact the MMA office: 2221 University Avenue SE, Suite 400, Minneapolis, Minnesota 55414; 612/378-1875. Information for each entry is arranged by date; name of program; primary sponsor; location; contact person.

MAY 1992

May 4-8 **Family Practice Review and Update** Office of CME, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of CME, Radisson Hotel Metrodome, Suite 107, 615 Washington Avenue SE, Minneapolis, MN 55414; 612/626-7600.

May 11 **Continent Urinary Diversion** Office of CME, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of CME, Radisson Hotel Metrodome, Suite 107, 615 Washington Avenue SE, Minneapolis, MN 55414; 612/626-7600.

May 11-15 **Practice of Internal Medicine** Mayo Clinic/Mayo Foundation; Mayo Foundation, Rochester, MN. CONTACT: Rita Kunz or Jan Fleck, Mayo Clinic/Mayo Foundation, Section of CME, 200 1st Street SW, Rochester, MN 55905.

May 12 **Gynecology and Gynecologic Oncology** Office of CME, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of CME, Radisson Hotel Metrodome, Suite 107, 615 Washington Avenue SE, Minneapolis, MN 55414; 612/626-7600.

May 12-14 **On the Cutting Edge: Etiology to Current Management of Diabetes** International Diabetes Center; International Diabetes Center, Minneapolis, MN. CONTACT: Cindy Poppitz, International Diabetes Center, 5000 West 39th Street, Minneapolis, MN 55416; 612/927-3393.

May 13 **Thrombolytic Therapy in Acute MI** Abbott Northwestern Hospital; Minneapolis Heart Institute, Minneapolis, MN. CONTACT: Minneapolis Heart Institute Foundation, 920 East 28th Street, Minneapolis, MN 55407; 612/863-3979.

May 13-15 **Current Concepts in Radiation Therapy** Office of CME, University of Minnesota Medical School; Mayo Memorial Auditorium, U of M, Minneapolis, MN. CONTACT: Becky Noren, Office of CME, Radisson Hotel Metrodome, Suite 107, 615 Washington Avenue SE, Minneapolis, MN 55414; 612/626-7600.

May 14-16 **Acupuncture for Pain Control** Hennepin County Medical Center; Hennepin County Medical Center, Minne-

apolis, MN. CONTACT: Laura Carroll, 701 Park Avenue, MC 867A, Minneapolis, MN 55415-1829; 612/347-2078.

May 15 **Behavioral Pediatrics for the Primary Care Practitioner** Minneapolis Children's Medical Center; Park Inn International, Minneapolis, MN. CONTACT: Betsy Julius, 2525 Chicago Avenue South, Minneapolis, MN 55404; 612/863-6206.

May 15 **Daily Management of HIV-Positive Patients** Office of CME, University of Minnesota Medical School; Sheraton Midway Hotel, St. Paul, MN. CONTACT: Becky Noren, Office of CME, Radisson Hotel Metrodome, Suite 107, 615 Washington Avenue SE, Minneapolis, MN 55414; 612/626-7600.

May 18-22 **Team Management of Diabetes Mellitus** International Diabetes Center; International Diabetes Center, Minneapolis, MN. CONTACT: Cindy Poppitz, International Diabetes Center, 5000 West 39th Street, Minneapolis, MN 55416; 612/927-3393.

May 21 **Adult Survivors of Sexual Abuse in Childhood** Group Health, Inc.; Minneapolis Metrodome Hilton, Minneapolis, MN. CONTACT: Debbie Bladine, Group Health, Inc., 2829 University Avenue SE, Minneapolis, MN 55414; 612/623-8479.

May 21-22 **Primary Care Treatment for Pressure Sores** Hennepin County Medical Center; Hennepin County Medical Center, Minneapolis, MN. CONTACT: Ann Samways, 701 Park Avenue, MC 8A, Minneapolis, MN 55415-1829; 612/347-2075.

May 22-23 **Advanced Life Support in Obstetrics (ALSO)** Health One Corporation; Earle Brown Center, Brooklyn Center, MN. CONTACT: Sue Hance, Health One Medical Education, 2810 57th Avenue North, Minneapolis, MN 55430; 612/574-7895 or 800/343-DOCS.

May 27-29 **Health Risk Assessment and Risk Management** Midwest Center for Occupational Health & Safety; Crown Sterling Suites Airport, Bloomington, MN. CONTACT: Registrar, Continuing Education, Midwest Center for Occupational Health & Safety, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

May 29-30 **Lasers in Orthopedic Surgery** Laser Center of Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Laser Center 39102, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-3000.

May 29-30 **Laparoscopic Urologic Surgery** Office of CME, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of CME, Radisson Hotel Metrodome, Suite 107, 615 Washington Avenue SE, Minneapolis, MN 55414; 612/626-7600.

JUNE 1992

June 4-6 **21st Annual Workshop on Clinical Hypnosis (Introductory and Advanced)** University of Minnesota Division of General Pediatrics & Adolescent Health, Department of Pediatrics, Office of CME, Medical School CME, & Extension; Sheraton Midway Hotel, St. Paul, MN. CONTACT: Becky Noren, Office of CME, Radisson Hotel Metrodome, Suite 107, 615 Washington Avenue SE, Minneapolis, MN 55414; 612/626-7600.

June 8-12 **Team Management of Diabetes Mellitus** International Diabetes Center; International Diabetes Center, Minneapolis, MN. CONTACT: Cindy Poppitz, International Diabetes Center, 5000 West 39th Street, Minneapolis, MN 55416; 612/927-3393.

June 10-12 **Topics and Advances in Pediatrics** Office of CME, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of CME, Radisson Hotel Metrodome, Suite 107, 615 Washington Avenue SE, Minneapolis, MN 55414; 612/626-7600.

June 11-25 **Scandinavia/Russia Air/Sea Cruise** INTRAV; Denmark, Russia, Finland, Sweden, Poland, Norway, Holland. CONTACT: North Central Medical Conference, 1845 Hampshire Avenue, #200, St. Paul, MN 55116; 612/698-1888.

June 12-13 **Advanced Laparoscopic Abdominal Surgery Seminar** Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, Minneapolis, MN 55407; 612/863-5461.

June 15-19 **Team Management of Diabetes Mellitus** International Diabetes Center; International Diabetes Center, Minneapolis, MN. CONTACT: Cindy Poppitz, International Diabetes Center, 5000 West 39th Street, Minneapolis, MN 55416; 612/927-3393.

June 17-19 **56th Annual Course Progress in Vascular Surgery** Department of Surgery, University of Minnesota Medical School; Willey Hall, University of Minnesota, Minneapolis, MN. CONTACT: Office of CME, Radisson Hotel Metrodome, Suite 107, 615 Washington Avenue SE, Minneapolis, MN 55414; 612/626-7600.

June 18 **Immunizations: New Directions and Controversies** Group Health, Inc.; Minneapolis Metrodome Hilton, Minneapolis, MN. CONTACT: Debbie Bladine, Group Health, Inc., 2829 University Avenue SE, Minneapolis, MN 55414; 612/623-8479.

June 20-July 2 **Midnight Sun Express & Alaska Passage** INTRAV; Fairbanks/Anchorage, Alaska. CONTACT: North Central Medical Conference, 1845 Hampshire Avenue, #200, St. Paul, MN 55116; 612/698-1888.

June 26-27 **Sexual Attitude Reassessment Seminars (SAR)** Program in Human Sexuality, Holiday Inn Metrodome, Minneapolis, MN. CONTACT: SAR Coordinator or Secretary, Program in Human Sexuality, FMC Building, 1300 South Second Street, Minneapolis, MN 55454; 612/625-1500.

Lakes, Colleges, & Cultural and Recreational Opportunities

This is only a portion of what the community of St. Cloud, Minnesota, has to offer. If you're either a Pediatrician or Obstetrician/Gynecologist, looking for a family oriented community and a quality practice opportunity, then explore what the

Women and Children's Medical Center

can offer. Ob/Gyn candidates can join an active four-physician, two-nurse-practitioner office featuring in-house ultrasound and ACR accredited mammography. Pediatric candidates can join an active six-physician, two-nurse-practitioner office that is in the process of setting up an adolescent medicine/allergy clinic.

Ob/Gyn's send CV to Vickie L. Nash, M.D., pediatricians send CV to Jon E. Dennis, M.D., Women and Children's Medical Center, PA, 1520 Northway Drive, St. Cloud, MN 56303.

June 26-27 **Minnesota Obstetrical and Gynecological Society Scientific Program** Minnesota Ob/Gyn Society; Lutsen Resort, Lutsen, MN. CONTACT: Susan Thompson, Department of Ob/Gyn, 5000 West 39th Street, Minneapolis, MN 55416; 612/924-1802.

AUGUST 1992

Aug. 20-22 **Operative Gynecology: Third Annual Live Televideo Conference** Mayo Clinic/Mayo Foundation; Mayo Foundation; Rochester, MN. CONTACT: Postgraduate Courses, Mayo Clinic/Mayo Foundation, 200 1st Street SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

SEPTEMBER 1992

Sept. 5 **Pediatric Emergency Medicine Conference—Topics in Pediatric Emergency Medicine** Minneapolis Children's Medical Center; Education Building, Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Kathy Ingerson, MCMC, 2525 Chicago Avenue South, Minneapolis, MN 55404; 612/863-5884.

Sept. 6-7 **Pediatric Emergency Medicine Conference—Pediatric Advanced Life Support (PALS)** Minneapolis Children's Medical Center; Education Building, Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Kathy Ingerson, MCMC, 2525 Chicago Avenue South, Minneapolis, MN 55404; 612/863-5884.

Sept. 10-11 **Second Annual Children's Hospital of St. Paul Practical Pediatrics Course for the Primary Care Physician** Children's Hospital of St. Paul; United/Children's Conference Center, St. Paul, MN. CONTACT: Sue Hance, Health One Medical Education, 2810 57th Avenue North, Minneapolis, MN 55430; 612/574-7895 or 800/343-DOCS.

Sept. 11-12 **Lasers in Orthopedic Surgery** Laser Center of Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Laser Center 39102, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-3000.

Sept. 18 **Thrombolytic Therapy in Acute MI** Abbott Northwestern Hospital; Minneapolis Heart Institute, Minneapolis, MN. CONTACT: Minneapolis Heart Institute Foundation, 920 East 28th Street, Minneapolis, MN 55407; 612/863-3979.

Sept. 18-19 **Advanced Laparoscopic Abdominal Surgery Seminar** Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

Sept. 29-Oct. 9 **Canada/New England Air/Sea Cruise** North Central Medical Conference; Canada and New England. CONTACT: North Central Medical Conference,

1845 Hampshire Avenue, Suite 200, St. Paul, MN 55116; 612/698-1888.

OCTOBER 1992

Oct. 2-3 **Advanced Laparoscopic Abdominal Surgery Seminar** Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

Oct. 8-24 **China/Yangtze River Adventure** North Central Medical Conference; Beijing, Chongqing, Yangtze River/Three Gorges, Xian, Shanghai, Hong Kong. CONTACT: North Central Medical Conference, 1845 Hampshire Avenue, Suite 200, St. Paul, MN 55116; 612/698-1888.

Oct. 9 **Current Clinical Cardiology for Physicians & the 11th Annual Jesse E. Edwards, M.D., Lecture** St. Paul Health Clinic/Health One Corporation; United/Children's Conference Center, St. Paul, MN. CONTACT: Eleanor Waldrup, 333 North Smith, St. Paul, MN 55102; 612/220-8558 or 800/343-DOCS.

Oct. 19-20 **Advanced Trauma Life Support (ATLS)** Health One Corporation; United/Children's Conference Center, St. Paul, MN. CONTACT: Sue Hance, Health One Medical Education, 2810 57th Avenue North, Minneapolis, MN 55430; 612/574-7895 or 800/343-DOCS.

Oct. 23 **Lyme Borreliosis Symposium** Abbott Northwestern Hospital, Minnesota Institute of Public Health, Lyme Disease Coalition of Minnesota; Airport Hilton, Minneapolis, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

Oct. 23-24 **Pelviscopic Surgery Including Laparoscopic Hysterectomy** Laser Center of Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Laser Center 39102, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-3000.

Oct. 23-24 **Fifth Annual New Ulm Fall Seminar** Sioux Valley Hospital/Health One Corporation; Holiday Inn, New Ulm, MN. CONTACT: Sue Hance, Health One Medical Education, 2810 57th Avenue North, Minneapolis, MN 55430; 612/574-7895 or 800/343-DOCS.

NOVEMBER 1992

Nov. 6 **Thrombolytic Therapy in Acute MI** Abbott Northwestern Hospital; Minneapolis Heart Institute, Minneapolis, MN. CONTACT: Minneapolis Heart Institute Foundation, 920 East 28th Street, Minneapolis, MN 55407; 612/863-3979.

Nov. 7 **Fourth Annual Oncology Conference** Health One Corporation; Radisson Ridgedale, Minneapolis, MN. CONTACT: Sue Hance, Health One Medical Education, 2810 57th Avenue North, Minneapolis, MN 55430; 612/574-7895 or 800/343-DOCS.

CARDIOLOGIST

Cardiologist, BC/BE, desired for consultative practice in delightful Minnesota community of 90,000 with referral base of 250,000. Personable, energetic person desired as sixth cardiologist in a 31-person Internal Medicine/Internal Medicine Subspecialty clinic. The St. Cloud community has:

- Three colleges -
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Mark J. Murphy, Administrator
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Physician Opportunities and Miscellaneous Listings

Classified rates are \$1.00 a word. Minimum monthly charge is \$35; with box number \$5 additional. Ads will not be accepted by phone.

- Placement of ads must be made six weeks before the date of publication (e.g., May 15 for July ad). Please send ad requests to *Minnesota Medicine*, 2221 University Avenue SE, Suite 400, Minneapolis, Minnesota 55414.
- The publisher reserves the right to decline or withdraw advertisements. The publisher is not responsible for clerical or typographical errors and is not permitted to divulge the identity of advertisers who have replies sent to box numbers.
- Cancellation of ads must be made by the first of the month preceding month of issue.

Johnson & Falls Search Associates is changing its name. Our success has created growth, and growth creates change. Our office has moved, and we have changed our name to **HEALTHCARE RESOURCE GROUP**. As the new name indicates, we offer a broader range of recruitment services not only locally, but nationally, through affiliates with offices in eastern and western states. With **Healthcare Resource Group**, you will have the ability to compare your current practice with practice opportunities nationally. Your search will be held in strictest confidence, and services will continue to be provided at no fee to candidates. For thorough assistance in expanding your professional options, please send CV or call Liz Johnson, Healthcare Resource Group, 9072 Preserve Blvd., Eden Prairie, MN 55347; 612/828-6890. (4/92-R)

Internist to join a progressive 13-physician group practice. Rural college town 30 miles from St. Paul, Minnesota. New clinic and constructing new hospital. Contact: Robert B. Johnson, M.D., River Falls, WI 54022; 715/425-6701. (*9/91-R)

Urgent Care/Primary Care physicians for over 90 group positions in metropolitan Phoenix/Tucson, Arizona. Excellent compensation/partnership opportunities. Other quality positions nationwide. Send CV or call: Mitch Young (MM), PO Box 1804, Scottsdale, AZ 85252; 602/990-8080. (*1/90-R)

Family Practitioner to join a progressive 13-physician group practice. Rural college town 30 miles from St. Paul, Minnesota. New clinic and constructing new hospital. Contact: Robert B. Johnson, M.D., River Falls, WI 54022; 715/425-6701. (*9/91-R)

Mankato: FP partner to join four board-certified family physicians, ages 34-43, in fast-growing, full-range practice. Ob optional. Population 40,000+. Seventy miles to Twin Cities. Four colleges nearby. Subspecialty consultation readi-

ly available on hospital staff. Academic appointment available. Call: Tony Giefer, M.D., 507/387-8231. (8/91-R)

Family Physicians: Well-established south suburban Minneapolis family practice group seeks associates part/full time to staff day clinic. Excellent call schedule, salary, and fringe benefits. Also seeking locum tenens to staff PT/FT Urgent Care Centers and/or day clinic. Contact: Administration, Family Physicians, P.A., 612/435-4125, or send inquiries to Suite 100, 14050 Nicollet Avenue South, Burnsville, MN 55337. (*9/89-R)

Mankato Clinic, Ltd. is seeking BC/BE physicians in the following specialties: invasive cardiology, oncology/hematology, pulmonary medicine, general surgery, gastroenterology, family practice, and general internal medicine. The Mankato Clinic is a 53-physician multispecialty group practice in south-central Minnesota with a trade-area population of +250,000. Guaranteed salary first year, incentive thereafter with full range of benefits and liberal time off. For more information call: Dr. B. C. McGregor, President, or Roger Greenwald, Executive Vice President, 507/625-1811 or write: 501 Holly Lane, Mankato, MN 56001. (12/91-R)

BC/BE Orthopedic Surgeon and BC/BE Family Practice, Internal Medicine, and Ob/Gyn Physician: Excellent opportunity to join well-established, progressive, 20-physician multispecialty group located in an economically sound community of 20,000 (drawing area of 40,000), 65 miles south of the Twin Cities. Full membership after one year. Competitive salary and fringe benefits package. Contact: Ed Durst, M.D., or Terry Tone, Administrator, 134 Southview, Owatonna, MN 55060; 507/451-1120. (2/92-R)

Forest Lake Doctor's Clinic is seeking a BC/BE family physician, pediatrician, ob/gyn, and internist to join 10-physician multispecialty group. Located 25 miles north of Minneapolis-St. Paul in progressive community with excellent schools, many beautiful lakes, recreational activities, golf, fishing, boating, skiing. Local hospital directly across street. Contact: Dr. Harvey J. Frank or Dr. Doug Sill, 121 SE 11th Avenue, Forest Lake, MN 55025; 612/464-7100. (4/90-R)

MDsearch assists medical groups and hospitals in their recruiting efforts. For confidential information on opportunities in the Upper Midwest, send CV and/or call collect: Mary Jo Cordes, MDsearch, PO Box 21507, St. Paul, MN 55121; 612/454-7291. (12/91-R)

Lake City, Minnesota: Family physician BC/BE needed to join three other FPs in progressive, growing practice on Lake Pepin/Mississippi River in southeastern Minnesota. Excellent first-year salary/benefits in a scenic community

ASPEN Medical Group

Aspen Medical Group has opportunities available for BC/BE physicians in the following specialties:

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Aspen is an independent, multispecialty group practice with eight clinics in the Minneapolis/St. Paul metropolitan area. We offer a competitive salary and benefits package; established, challenging practices; reasonable call and clinic responsibilities; and no practice buy-in. For further information, please call or send your CV to:

Nancy Borgstrom
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1020 Bandana Boulevard West
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General Orthopaedic practice with emphasis on adult reconstructive surgery, sports medicine, and trauma, seeks additional *BC/BE Orthopaedic Surgeon*.

Resort community with abundance of winter and summer recreational outlets.

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Send CV to: Terence J. Kennedy, M.D., 1500 Irving St., Alexandria, MN 56308 or call 1-800-762-1177.

with multiple recreational opportunities. Contact: D.D. Pflaum, M.D., 303 South Washington, Lake City, MN; 612/345-3318. (8/90-R)

Olmsted Medical Group is seeking BC/BE physicians in the following specialties: orthopedics, radiology, family practice, emergency medicine, and ob/gyn. Great opportunity for well-trained physicians to join a 55+ physician multispecialty group in a dynamic, progressive practice. In addition to the main office in Rochester, the group operates eight branch offices in southeastern Minnesota. Excellent salary/benefits package includes malpractice insurance, flexible benefits plan, 401(k) and profit sharing, and relocation assistance. Send CV to: Olmsted Medical Group, Attn: Susan Schuett, 210 Ninth Street SE, Rochester, MN 55904. (1/92-R)

Downtown Office Space for Rent: Physician in the Medical Arts Building, 825, wishes to sublet to another physician on a part-time basis for the purpose of sharing overhead expenses. Call: 612/370-0553. (6/90-R)

Wisconsin: 120-physician multispecialty clinic in the Fox River Valley of northeastern Wisconsin desires two BC/BE pediatricians to join department of 15 BC/BE pediatricians. Excellent compensation and benefits package, leading to shareholder status after two years. The community offers a superb recreational, cultural, and family environment in which to practice. For information please call or write: Howard Kidd, M.D., La Salle Clinic, 411 Lincoln Street, Neenah, WI 54956; 414/727-4276. (3/91-R)

Family Physician wanted to join three board-certified M.D.s in well-established, expanding group practice. Weekend ER coverage. No buy-in. Financial package hard to beat. Enjoy a progressive, rural city within easy reach of St. Cloud and Minneapolis. Contact: Dr. Jim Mohs, Melrose Clinic, 603 West Main Street, Melrose, MN 56352; office, 612/256-4228; home, 612/256-3488. (4/91-R)

Internal Medicine, Pediatrics, and Dermatology practice opportunities available at the Faribault Clinic. The Faribault Clinic is a multispecialty group practice of 19 physicians. Faribault is located 50 miles south of Minneapolis on I-35. For more information contact: Ray W. Wood, M.D., or Ken Smith, Administrator, 924 NE First Street, Faribault, MN 55021; 507/334-3921. (4/90-R)

Stillwater: Multispecialty group with emphasis on primary care seeking BC/BE family physician, pediatrician, and internist. Scenic location with excellent school system, supportive medical community with strong local hospital, competitive salary and benefits. Send CV to: Jon Petersen, St. Croix Valley Clinic, 921 Greeley, Stillwater, MN 55082; 612/439-2215. (12/92-R)

Internist to join two internists in active practice in scenic upper Michigan. Medical school affiliation. Contact: North Shore Internal Medicine, 2420 First Avenue South, Escanaba, MI 49829; 906/786-1563. (*11/91-R)

Family Physician wanted to join five-physician, two-P.A., two-site family practice group in St. Anthony and Shoreview. Ob available. Competitive salary, benefits package, and call schedule. Contact: Gerald Pitzl, M.D., Silver Lake Clinic PA, 612/788-9251. (7/91-R)

General Surgeon: Five-man family practice group seeks surgeon. Only clinic in city of 8,000, one hour from Minneapolis. Position should generate adequate salary and lots of family time. Write: Minnesota Medicine (853), 2221 University Avenue SE, Suite 400, Minneapolis, MN 55414. (8/91-R)

Primary Care BC/BE General Internist or Subspecialist who will practice 60 percent general internal medicine wanted in the "heart of the lakes" to join dynamic group of six family practitioners and one general surgeon. Send inquiries or CV to Julayne Mayer, Director of Physician Recruitment, Tri-County Hospital, 415 North Jefferson, Wadena, MN 56482; 800/950-0314, 218/631-3510; fax: 218/631-9292. (5/92-R)

Pediatrician wanted to join group of five board-certified pediatricians in a well-established, progressive group practice. Located in Minneapolis, minutes away from Children's Medical Center. Small practice stressing patient care and preventive medicine. Contact: Gregg Savitt, M.D., 3145 Hennepin Avenue, Minneapolis, MN 55408. (9/91-R)

Mora, Minnesota—Family Physician needed to join a seven-member FP group. We are a well-established, expanding practice and offer competitive salary and benefits package with partnership available. We have JCAHCO-accredited hospital, on-site consultations from numerous specialty disciplines, satellite offices located in Pine City and Hinckley. Mora is a progressive community located 65 miles north of the Twin Cities with an excellent school system and many cultural and recreational opportunities within easy access. Contact: Larry J. Brettingen, M.D., 224 Seventh Street, Mora, MN 55051; 612/679-1340. 6-5/92

Family Practice—Minnesota: Enjoy the benefits of country living yet have the resources of a major metropolitan area close at hand. Health One Buffalo Hospital is seeking a family physician to join two FPs and a nurse practitioner in its clinics in Annandale and Winsted. Share call with five physicians. Competitive compensation with excellent benefits including year-round outdoor recreation in "the heart of the lakes." Contact: Kim Isenberg, Health One Buffalo Hospital, 303 Catlin Street, PO Box 609, Buffalo, MN 55313; 612/682-1212, Ext. 245. 6-6/92

One or Two Family Practice Physicians to join five family practitioners. Population 8,000. One hour south of Burnsville Center. Lakes, industry, negotiable salary. Clinic adjacent to hospital. Ample free time to enjoy family life. Contact James W. Dey, M.D., or Ruth Hawker, Clinic Manager, 501 North State Street, Waseca, MN 56093; 507/835-3110. (2/92-R)

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Fairview Clinic Services
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Bloomington, MN 55420
(612) 885-6225 or toll free 1-800-842-6469

Wisconsin—Fourth BC/BE Obstetrician/Gynecologist needed to join stable, progressive, primary-care-based HMO/group practice in university town of 60,000 near Minneapolis/St. Paul. Excellent quality of life and outstanding recreational area. Competitive salary and fringe benefits. Contact: Stuart R. Lancer, M.D., M.B.A., Medical Director, Group Health Cooperative, PO Box 3217, Eau Claire, WI 54702-3217; 715/836-8552. *4-6/92

Wisconsin—Family Practitioner Needed by progressive and growing group practice in west-central Wisconsin city of 60,000. Ninety miles from Minneapolis/St. Paul. Primarily prepaid practice with large component FFS. Highly competitive salary with excellent fringe benefits. Practice high-quality care in a good recreational area. Send CV to: Stuart R. Lancer, M.D., M.B.A., PO Box 3217, Eau Claire, WI 54702-3217; 715/836-8552. *4-6/92

Ideal Internal Medicine Practice: Excellent opportunity for BC/BE internist to establish a prosperous practice. Progressive 107-bed community hospital with a medical staff of 45 physicians and a service-area population of over 45,000. Vibrant Northern Michigan community with all summer and winter recreational activities. Salary guarantee of \$110,000 with excellent benefits. Send CV or contact: John Schon, Administrator, Dickinson County Hospitals, 400 Woodward Avenue, Iron Mountain, MI 49801; 800/323-8856. *1-5/92

BC/BE Internist with or without subspecialty training to join six other internists in 16-member multispecialty clinic in Worthington, Minnesota. Liberal vacation and meeting time including stipend. Contact R. D. Sudmeier, M.D., or John J. Sieve, Administrator, Worthington Medical Center, P.A., Worthington, Minnesota 56187; 507/372-2921.

3-5/92

Family Practice: Physicians seeking a BC/BE family practice physician for the Norway, Michigan, service area. The physician would have the option of joining one of the existing practices and/or setting up his/her own practice. Anderson Memorial Hospital is a part of Dickinson County Hospitals and has a service-area population of over 45,000. Contact: Dr. Paul Hayes' office, 906/563-9255, or Dr. William Gladstone's home, 906/563-8743. Anderson Memorial Hospital, Main Street, Norway, MI 49870; 906/563-9243. *1-5/92

BC/BE Ob/Gyn needed to join active solo ob/gyn practice in suburban Minneapolis. Purchase of practice with favorable terms available if desired. Call 612/377-7373 evenings.

3-5/92

Diagnostic Radiologist: Excellent opportunity to join a three-man group in a flourishing general radiology practice that includes all modalities (angio and interv. limited at this point but could be expanded). Generous salary leading to early partnership in professional corporation. Great com-

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Send CV or contact:
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When you join the Duluth Clinic, you'll become part of a 170-physician multi-specialty group located on the beautiful shores of Lake Superior and close to the Boundary Waters Canoe Area Wilderness. As a regional referral center, the Clinic serves over 500,000 people in northern Minnesota, northern Wisconsin and upper Michigan through its main clinic and a network of 10 neighborhood centers.

Rewarding opportunities are currently available for BC/BE physicians in the following areas:

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-General
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-Electrophysiology
-Interventional | • Infectious
Diseases | • Pediatrics |
| • Cardiothoracic
Surgery | • Internal Medicine | • Pediatric
Pulmonology/
Intensivist |
| • Dermatology | • Neurology | • Plastic Surgery |
| • Emergency
Medicine | • OB/GYN | • Pulmonology |
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munity where recreational and cultural activities abound. Relatively free from metro competitive hassles. Send CV to: James P. Zachman, M.D., Radiology Department, Rice Memorial Hospital, Willmar, MN 56201; 612/231-4530.
3-5/92

Door County, Wisconsin. Emergency Medicine. BC/BE family practice, internal medicine, pediatrics, or emergency medicine. General emergency medicine experience required. ACLS/ATLS required, PALS preferred. Full-time position with 8 to 10 24-hour shifts monthly with flexibility. Competitive salary and benefits package. Modern 89-bed hospital with a new emergency department and outpatient services addition. Approximately 10,000 visits per year. Exceptional four seasons' recreation along Lake Michigan shores. Proximity to Milwaukee/Chicago. Top-rated schools. Quality community life. Send CV to: Priscilla Khoury, Physician Recruitment Coordinator, 330 South 16th Place, Sturgeon Bay, WI 54235.
*3-5/92

Pain Fellowship: Position for PGY4 or PGY5 to participate in a one- or two-year program of clinical pain management and clinical or basic research beginning July 1, 1992, sponsored by the Department of Neurology, Hennepin County Medical Center in Minneapolis. The program maintains an active outpatient practice and sees hospitalized patients on a referral basis from all departments. Opportunities to learn pharmacological management, acupuncture, peripheral nerve blockade, biofeedback techniques, and other areas related to pain are available. Hennepin County Medical Center is an equal opportunity educator and employer and specifically invites and encourages applications from women and minorities. Application and CV should be sent to: Miles J. Belgrade, M.D., Director, Hennepin Pain Clinic, Department of Neurology, Hennepin County Medical Center, 701 Park Avenue South, Minneapolis, MN 55415.
3-5/92

Great Opportunity for Family Practice Physician: \$100 M package guaranteed. Good fishing/hunting. Excellent school system. Southwest Minnesota, located two hours from Twin Cities, 40 minutes from Lake Okoboji. Send résumé to PO Box 310, Mountain Lake, MN 56159.
2-5/92

General Surgeon: BC/BE to join progressive 24-physician multispecialty group practice. Advantages of rural setting with metropolitan practice style, 25 miles from Minneapolis. Group has excellent reputation and large geographical referral area. Recently expanded facility is adjacent to a newly remodeled 110-bed hospital. Comprehensive benefits package with excellent remuneration. For more information, contact Joseph E. Van Kirk, M.D., Lakeview Clinic, Ltd., 424 State Highway 5 West, Waconia, MN 55387; 612/442-4461 or 612/446-1295.
2-5/92

Alexandria, Minnesota: Three-person internal medicine group desires to add a fourth partner. Send CV to J. E. McCrery, M.D., 1527 Broadway, Alexandria, MN 56308.
6-9/92



ALEXANDRIA CLINIC, P. A.

The Alexandria Clinic, P.A., is a 16 physician multi-specialty Group currently recruiting physicians in the following specialties:

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Timothy A. Hunt, Administrator
Alexandria Clinic, P.A.
610 Fillmore Street
Alexandria, MN 56308
612 • 763 • 5123

First Annual Clinical Neurology and Behavioral Science Symposium: Focus on Geriatrics. May 29-30, 1992, Landmark Inn Resort, Egg Harbor, Wisconsin. For more information, contact: Nadine Punke, Office of Medical Education, 1000 North Oak Avenue, Marshfield, Wisconsin 54449; 800/782-8581, Ext. 5207.
2-5/92

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(*4/92-R)

Falls Medical Search Seeks Physicians for practice opportunities locally and nationally. To explore new practice options confidentially, send your CV or call: Pat Falls, Falls Medical Search, 34 Forest Dale Road, Minneapolis, MN 55410; 612/922-0207 or 800/383-8916.
(*5/92-R)

Orthopedic Surgeon and Pediatrician: A growing university community in southern Minnesota has practice opportunities for an orthopedic surgeon and pediatrician. Excellent call schedule and outstanding financial compensation package. Attractive lifestyle for someone who enjoys hunting, fishing, a friendly community, and not spending time in traffic. Contact Verne Meyer, Staffing Consultant, Delacore, 101 Park Place, Hutchinson, MN 55350; or call 800/833-8487.
3-6/92

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Resort community with abundance of winter and summer recreational outlets.

Send CV to: Terence J. Kennedy, M.D., 1500 Irving St., Alexandria, MN 56308 or call 1-800-762-1177.

Door County, Wisconsin: BC/BE internist. Modern, 89-bed community hospital with new outpatient services addition. Competitive guaranteed salary, incentive package, malpractice insurance, attractive benefits. Exceptional four-season recreation along Lake Michigan shores. Proximity to Milwaukee/Chicago. Top-rated schools. Quality community life. Send CV to: Priscilla Khoury, Physician Recruitment Coordinator, 330 South 16th Place, Sturgeon Bay, WI 54235. *3-6/92

Come in From the Cold—Family Practice, Crane, Texas: Here are four good reasons to move from Minnesota to Texas: January, February, March, and Texas has no state income tax. Enjoy city amenities without having to live there. Crane Memorial Hospital is looking for two family practitioners. Beautiful modern 28-bed hospital and office building. Small town, medically underserved area. Health care professional shortage area. Only 45 minutes from international airport. Only 30 minutes from interstate highway. Excellent schools. Warm, dry climate. Great recruitment package. Contact: Steve Goode, Administrator, Crane Memorial Hospital, 1310 South Alford Street, Crane, TX 79731. Phone 915/558-3555. *3-7/92

The University of Minnesota School of Dentistry invites applications for part-time and full-time non-regular faculty for consultative diagnostic and treatment planning services in specialty clinics. M.D. required, with training and experience in otolaryngology, cleft palate patient care, and/or physical medicine and rehabilitation with experience in chronic pain. The University of Minnesota is an equal opportunity educator. Send résumé [indicating specialty or area(s) of clinical expertise], by 6/30/92 to: Dean Richard P. Elzay, University of Minnesota School of Dentistry, 515 Delaware Street SE, Minneapolis, MN 55455. *1-5/92

The University of Minnesota School of Dentistry invites applications for research fellow (M.S., M.D., or D.D.S. required), research associate (Ph.D. required), and postdoctoral associate (Ph.D. within three years required) positions. Applicants must have at least two years of research training. Positions will provide research expertise in planning and execution of research design and methodology. The University of Minnesota is an equal opportunity educator and employer. Send résumé, indicating areas of research training, by 6/30/92 to: Dean Richard P. Elzay, University of Minnesota School of Dentistry, 515 Delaware Street SE, Minneapolis, MN 55455. *1-5/92

Family Practice Opportunity: Hastings Family Practice Clinic is looking for a BC/BE family practitioner to practice with four established residency-trained physicians. Hastings is located on the Mississippi River, 30 minutes from St. Paul, 45 minutes from Minneapolis. Our area offers many recreational activities and an excellent school system. The clinic is attached to a 50-bed complex and nursing home with 24-hour ER coverage. Send CV to D. R. Eckes, M.D., 1285 Nininger Road, Hastings, MN 55033; or call 612/437-8666 and ask for Marcia. 1-5/92

Internal Medicine, Family Practice, Urgent Care, OB/Gyn, and Academics: Positions in large metropolitan cities, urban and rural communities with a concentration in the Great Lakes area and Plains states. Whether you prefer a cosmopolitan lifestyle, a city surrounded by nature and the beauty of the four seasons, the peaceful rolling farm country, or perhaps life in historic villages—there is something for you. To discuss your practice preferences and these opportunities, please call our toll-free number, 800/243-4353, or send your CV to Strelcheck & Associates, Inc., 10624 North Port Washington Road, Mequon, WI 53092.
*3-7/92

Ohio—Wisconsin—Missouri: Attractive opportunities in metropolitan and scenic recreational areas. Locations near pristine lakes, white water rivers, and national forests. Others in college communities offering professional and Big 10 college sports, fine arts, and a broad spectrum of nationally renowned CME programs. Positions available: allergy, dermatology, neurosurgery, occupational medicine, oncology, orthopedics, psychiatry, rheumatology, and urology. To discuss your practice preferences and these opportunities, please call our toll-free number, 800/243-4353, or send your CV to Strelcheck & Associates, Inc., 10624 North Port Washington Road, Mequon, WI 53092.
*3-7/92

Urgent Care: FT or PT opportunities available in busy, well-established, Cedar Rapids urgent-care center. Occupational medicine including pre-employment evaluations and work-related injury treatment are also part of the practice. X-ray, laboratory, and physical therapy services available within clinic. Cedar Rapids, population 110,000, is located in eastern Iowa and is 30 minutes from the University of Iowa. Excellent compensation and scheduled hours. Mail CV or call Bob Waste, Mercy Care Management, PO Box 786, Cedar Rapids, Iowa 52406; 319/398-6460. 3-7/92

General Surgeon: Five-man family practice group seeks surgeon. Only clinic in city of 8,000, one hour from Minneapolis. Position should generate adequate salary and lots of family time. Please contact James W. Dey, M.D., or Ruth Hawker, Clinic Manager, 501 North State Street, Waseca, MN 56093; 507/835-3110. (5/92-R)

One or Two Family Practice Physicians to join five family practitioners. Population 8,000. One hour south of Burnsville Center. Lakes, industry, negotiable salary. Clinic adjacent to hospital. Ample free time to enjoy family life. Contact James W. Dey, M.D., or Ruth Hawker, Clinic Manager, 501 North State Street, Waseca, MN 56093; 507/835-3110. (5/92-R)

Redwood Falls, Minnesota—Family Physicians: Four family physicians, one general surgeon, looking to add one or two BC/BE family physicians. Superb benefits and retirement package, very liberal vacation time. Limited ER call. Contact: Jim Schulte, Redwood Falls Hospital, 100 Fallwood Road, Redwood Falls, MN 56283; 507/637-2907.
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Medical Director: Immediate opening at New Beginnings at Waverly, a 40-bed JCAHO adult chemical dependency treatment center located 35 miles west of Minneapolis. Duties: H&P, patient education, UR/case management, involvement and participation in a multidisciplinary treatment approach to therapy. Minnesota license required. Malpractice insurance provided, exceptional benefits, 401k, and pension. Please send CV: Human Resources, New Beginnings, Route 1, Box 86, Waverly, MN 55390; or call Jane H., Human Resources, or Gil G., Administrator. EOE.
*1-5/92

Staff Physician: Student Health Service at Mankato State University starting July 1992 (negotiable). Provide outpatient medical care for diverse student population in a comprehensive outpatient center that offers general medical care, laboratory, pharmacy, and X-ray services to adolescent and adult students. Health education is a major focus. BC/BE, preferably family practice or internal medicine. Minnesota license eligible. Salary competitive, excellent benefits. Send application letter, CV, and names, addresses, and phone numbers of three references to Donald H. Craig, Ph.D., Director of Counseling and Health Services, PO Box 8400, MSU #21, Mankato, MN 56002; 507/389-6276. MSU, a comprehensive university of 16,500 students located 80 miles south of Minneapolis/St. Paul, is actively seeking faculty and staff that will enrich its cultural, racial, and ethnic communities. 1-5/92

Family Physician: Practice community-oriented primary care in an interesting multi-cultural clinic. Opportunities to teach students and residents. No call. Contact Teresa Quinn, M.D., West Side Community Health Center, 153 Concord Street, St. Paul, MN 55107; 612/222-1816. 1-5/92

Want to Feel Good? Want a Tax Deduction? Donate your used medical equipment to the San Lucas Toliman Mission in Guatemala. A new clinic will be complete this summer. The mission is supported by the Catholic Archdiocese of New Ulm. Call Alex G. Webb, M.D., 612/452-5174, for more information. *1-5/92

Family Practice/Primary Care Physician to provide part-time ambulatory care services for the Minnesota Department of Corrections at the Oak Park Heights Facility. The facility is located 25 miles east of the metro area in the lovely St. Croix Valley. Salary and hours are negotiable. For more information, contact Dana Baumgartner, Health Care Administrator, Minnesota Department of Corrections, 300 Bigelow Building, 450 North Syndicate Street, St. Paul, Minnesota 55104; 612/642-0248. *1-5/92

Full- or Part-Time Family Physician or Internal Medicine Physician for outpatient family practice clinics. No ob, no ER or hospital responsibilities. Very progressive north lakes practice located in Nisswa, Pequot Lakes, and Pine River, Minnesota. Contact Fred Huff, Pine and Lakes Clinics, Box 88, Pine River, MN 56474. 3-7/92

General Internal Medicine Faculty Positions: The General Internal Medicine Division at Hennepin County Medical Center has full-time faculty positions available for internists interested in primary care medicine beginning on or about July 1, 1992. Three enthusiastic BC/BE general internists are being sought to deliver primary care services to traditional Hennepin County patients. As well, the physicians would participate in some resident-medical student teaching and other activities of an expanding General Medicine Division. Academic rank will be established at the University of Minnesota. Competitive salary and excellent benefits package is offered through Hennepin Faculty Associates, an equal opportunity/affirmative action employer. Contact or

send CV to Craig Garret, M.D., Department of Medicine, Hennepin County Medical Center, 701 Park Avenue South, Minneapolis, MN 55415; 612/347-2703. *1-5/92

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†Constipation, which is easily managed in most patients, is the most commonly reported side effect of Calan SR.

‡Verapamil should be administered cautiously to patients with impaired renal function.

BRIEF SUMMARY

Contraindications: Severe LV dysfunction (see **Warnings**), hypotension (systolic pressure < 90 mm Hg) or cardiogenic shock, sick sinus syndrome (if no pacemaker is present), 2nd- or 3rd-degree AV block (if no pacemaker is present), atrial flutter/fibrillation with an accessory bypass tract (eg, WPW or LGL syndromes), hypersensitivity to verapamil.

Warnings: Verapamil should be avoided in patients with severe LV dysfunction (eg, ejection fraction < 30%) or moderate to severe symptoms of cardiac failure and in patients with any degree of ventricular dysfunction if they are receiving a beta-blocker. Control milder heart failure with optimum digitalization and/or diuretics before Calan SR is used. Verapamil may occasionally produce hypotension. Elevations of liver enzymes have been reported. Several cases have been demonstrated to be produced by verapamil. Periodic monitoring of liver function in patients on verapamil is prudent. Some patients with paroxysmal and/or chronic atrial flutter/fibrillation and an accessory AV pathway (eg, WPW or LGL syndromes) have developed an increased antegrade conduction across the accessory pathway bypassing the AV node, producing a very rapid ventricular response or ventricular fibrillation after receiving I.V. verapamil (or digitalis). Because of this risk, oral verapamil is contraindicated in such patients. AV block may occur (2nd- and 3rd-degree, 0.8%). Development of marked 1st-degree block or progression to 2nd- or 3rd-degree block requires reduction in dosage or, rarely, discontinuation and institution of appropriate therapy. Sinus bradycardia, 2nd-degree AV block, sinus arrest, pulmonary edema and/or severe hypotension were seen in some critically ill patients with hypertrophic cardiomyopathy who were treated with verapamil.

Precautions: Verapamil should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) or impaired renal function, and patients should be monitored for abnormal prolongation of the PR interval or other signs of overdosage. Verapamil may decrease neuromuscular transmission in patients with Duchenne's muscular dystrophy and may prolong recovery from the neuromuscular blocking agent vecuronium. It may be necessary to decrease verapamil dosage in patients with attenuated neuromuscular transmission. Combined therapy with beta-adrenergic blockers and verapamil may result in additive negative effects on heart rate, atrioventricular conduction and/or cardiac contractility; there have been reports of excessive bradycardia and AV block, including complete heart block. The risks of such combined therapy may outweigh the benefits. The combination should be used only with caution and close monitoring. Decreased metoprolol and propranolol clearance may occur when either drug is administered concomitantly with verapamil. A variable effect has been seen with combined use of atenolol. Chronic verapamil treatment can increase serum digoxin levels by 50% to 75% during the first week of therapy, which can result in digitalis toxicity. In patients with hepatic cirrhosis, verapamil may reduce total body clearance and extrarenal clearance of digitoxin. The digoxin dose should be reduced when verapamil is given, and the patient carefully

monitored. Verapamil will usually have an additive effect in patients receiving blood-pressure-lowering agents. Disopyramide should not be given within 48 hours before or 24 hours after verapamil administration. Concomitant use of flecainide and verapamil may have additive effects on myocardial contractility, AV conduction, and repolarization. Combined verapamil and quinidine therapy in patients with hypertrophic cardiomyopathy should be avoided, since significant hypotension may result. Concomitant use of lithium and verapamil may result in a lowering of serum lithium levels or increased sensitivity to lithium. Patients receiving both drugs must be monitored carefully. Verapamil may increase carbamazepine concentrations during combined use. Rifampin may reduce verapamil bioavailability. Phenobarbital may increase verapamil clearance. Verapamil may increase serum levels of cyclosporin. Verapamil may inhibit the clearance and increase the plasma levels of theophylline. Concomitant use of inhalation anesthetics and calcium antagonists needs careful titration to avoid excessive cardiovascular depression. Verapamil may potentiate the activity of neuromuscular blocking agents (curare-like and depolarizing); dosage reduction may be required. There was no evidence of a carcinogenic potential of verapamil administered to rats for 2 years. A study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. Pregnancy Category C. There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor, and delivery only if clearly needed. Verapamil is excreted in breast milk; therefore, nursing should be discontinued during verapamil use.

Adverse Reactions: Constipation (7.3%), dizziness (3.3%), nausea (2.7%), hypotension (2.5%), headache (2.2%), edema (1.9%), CHF, pulmonary edema (1.8%), fatigue (1.7%), dyspnea (1.4%), bradycardia: HR < 50/min (1.4%), AV block: total 1° 2°, 3° (1.2%), 2° and 3° (0.8%), rash (1.2%), flushing (0.6%), elevated liver enzymes, reversible non-obstructive paralytic ileus. The following reactions, reported in 1.0% or less of patients, occurred under conditions where a causal relationship is uncertain: angina pectoris, atrioventricular dissociation, chest pain, claudication, myocardial infarction, palpitations, purpura (vasculitis), syncope, diarrhea, dry mouth, gastrointestinal distress, gingival hyperplasia, ecchymosis or bruising, cerebrovascular accident, confusion, equilibrium disorders, insomnia, muscle cramps, paresthesia, psychotic symptoms, shakiness, somnolence, arthralgia and rash, exanthema, hair loss, hyperkeratosis, macules, sweating, urticaria, Stevens-Johnson syndrome, erythema multiforme, blurred vision, gynecomastia, galactorrhea/hyperprolactinemia, increased urination, spotty menstruation, impotence.

4/11/91 • P91CA6277V

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JUNE 1992

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Exceptional professional and recreational choices are yours in West Michigan. Due to rapid growth, the Butterworth Health System offers attractive professional positions in its 530 bed tertiary care teaching hospital, 4 affiliate hospitals, and 7 Med+Centers. Positions are available in pediatrics, medicine/pediatrics, internal medicine, surgery, orthopedic surgery, otolaryngology, radiology, and OB/GYN. Opportunities include group practice, partnership, and solo or salaried urgent care and outpatient practices.

Choose Butterworth Hospital in Grand Rapids, which serves a population of 700,000, plus a 13 county referral area, or a small community or rural environment at one of the affiliate hospitals. Grand Rapids is West Michigan's cultural, educational, and economic center. With Lake Michigan only 30 miles away and numerous forests and parks nearby, there are ample opportunities for recreation and entertainment. Listed below are a few of the many opportunities available.

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- **Multi-Specialty Outpatient Group: Family Practitioner, Med/Peds, Internal Medicine, Pediatrician**
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For information about the above positions, please call or write to
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JUN 1 1992

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COVER

HealthRight generated intense debate this legislative session. Despite supporting universal access, the MMA was among the bill's opponents. But now that HealthRight is law, the MMA plans to help make it work—with improvements—says our cover story (page 21), which examines why the MMA opposed the bill. To help clarify HealthRight's mandate for change, our Medicine Law & Policy article (page 35) summarizes the act's key components.

Cover art by Cindy Lindgren.

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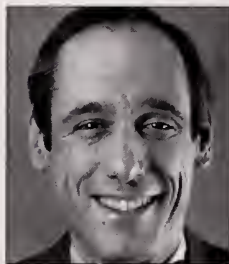
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HealthRight

Eureka! What Have We Wrought?

Edmund C. Burke, M.D.

Minnesota legislators appeared to make a run for the glory this session. After creating the controversial HealthRight legislation, the "Gang of Seven" burst forth as if to say "Eureka, see what a miracle we have wrought!" But what they created was a maelstrom of reaction from individual physicians, organized medicine, and hospital administrators. It is apparent the Gang of Seven had no intention of allowing significant input from the medical profession; instead, they worked assiduously behind closed doors, under considerable pressure from the governor. Medicine first reacted to the legislation with angry, protesting letters, some moderate, but some vituperatively lashing out at what was deemed ill-conceived legislation that failed to recognize the efficient and successful delivery of medical care in this state.

Now that HealthRight is law, we can look back on our attempts to change or stop the legislation and learn from the experience, and we can plan for the future, which we hope will bring significant improvements. This month's cover story (page 21) examines why the MMA chose to oppose the bill despite its long-standing support for universal access to health care, and the Medicine Law & Policy article (page 35) summarizes the act's key components.

Looking back, I commend physicians for their superb effort to effect needed change in HealthRight; however, I notice that, as physicians, we could use some lessons in communicating with lawmakers. While most of the vocal dissent was rational and fair, some physicians inappropriately expressed their anger through rude rather than reasoned phone calls and letters to legislators. This is certainly not the way to deal with



"Efforts to change HealthRight are bound to have good results."

lawmakers. Although only a small number of physicians resorted to such tactics, I suggest the MMA plan an educational program to teach physicians how to deal effectively and professionally with legislators and the public.

The MMA was also criticized for encouraging patients to contact their legislators about HealthRight. University of Minnesota ethicist Arthur Caplan, Ph.D., claimed physicians were not ethical in their attempt to politicize the doctor-patient relationship. Responding to such criticism, AMA trustee Nancy Dickey, M.D., said, "the AMA has no policy on politicking in the office, nor is it opposed to such activities." In fact, she continues, "the AMA encourages physicians to discuss issues with patients." She believes patients should consider physicians one of their best sources regarding socioeconomic issues related to medicine.

Now that HealthRight is law, physicians are ready to work with legislators to bring about needed change, and we should immediately

plan our strategy for 1993. With some work, HealthRight could, in the future, be a beneficial bill. Rep. Dave Bishop, IR-Rochester, recently recommended before the Zumbro Valley Medical Society that physicians adopt limited and modest goals and start with the elimination of mandatory assignment. Second, he recommends that physicians push for protection of education and research money. Without such protection, institutions that provide physicians for Minnesota may be restricted in the number of physicians graduating from future classes. Bishop believes HealthRight is a hollow bill that misrepresents the uninsured; it does not mandate coverage, and, in fact, it offers very little medical coverage and is not free.

Sen. Lyle Mehrkens, IR-Red Wing, says in the April 30 *Lake City Graphic* that he initially was optimistic about HealthRight, but he voted against it. He believes Minnesotans should have access to affordable health care—an issue the new law does not adequately address. He also has concerns about the role of the newly mandated Health Care Commission in controlling costs. Nonetheless, he says he is looking forward to making changes. I find it promising that legislators support our goal to improve HealthRight.

Efforts to change HealthRight are bound to have good results in the long run but will require much work in upcoming legislative sessions. Eventually, we may have a law that makes us proud. I have little doubt our legislators are prepared for a series of negotiations in an attempt to provide extended health care access to the uninsured, to control health care costs, and to avoid extensive bureaucracy that could counteract our efforts at cost containment.

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Is Balanced Medical Reporting Too Much to Expect?

I found the April 1992 issue of *Minnesota Medicine* both interesting and unique. Permit me to comment on one of the articles.

The cover story by Ralph Heussner on Dr. Michael Breen (page 20) particularly attracted my attention. I have some major reservations about the role of the visual and print media in presenting news of medical interest. These reservations are not academic. On the contrary, I think the media contribute to unrealistic expectations of what modern medical care can offer, directly affecting care. Although more balanced medical news reporting might be less newsworthy, I think it is the responsibility of people like Dr. Breen to be more accurate and realistic in their reporting. Dr. Breen apparently admits that his television medical news includes an element of oversimplification and that TV news is a form of entertainment. I think this belittles the intelligence of the audience, implying that most people have little interest in truth, but prefer to be entertained full time.

Thank you for listening.

Seymour Handler, M.D.
North Pathology Associates
Robbinsdale, Minnesota

Media Mishandle Medical News

Recently, I wrote letters to some local media about their coverage of a *New England Journal of Medicine* article about beta-agonists and sudden death (N Engl J Med 1992;326:301-6). One letter, to the Minneapolis-based *Star Tribune*,



criticized that paper's inflammatory, misleading front-page headline, "Overuse of Asthma Medications is Considered Life-Threatening." The other, to WCCO-TV, complained about Dr. Michael Breen's disastrous coverage of the *NEJM* article. In both letters, I described an elderly patient of mine who was admitted to the hospital in respiratory failure because she stopped using her albuterol inhaler after she heard media coverage of this article. My letter to the *Star Tribune* was published in part, and I have just received a reply from WCCO acknowledging that they received many complaints about this coverage and responded publicly. However, they defended the broadcast as factually accurate.

I think it is time the medical community barraged the news media with criticism of their coverage of medical topics when they are inaccurate and sensationalistic. We all must combat this problem one-on-one with our patients when they call with anxious questions about an article or a TV report, but I am increas-

ingly convinced that the media must be held accountable. Letters to the editor are a start, but perhaps we need other forums to reach the public at large directly so that we may explain the facts about misreported medical information.

I would welcome other comments on this.

Charles R. Meyer, M.D.
Consultants Internal Medicine
Minneapolis, Minnesota

Speaking of M.D. Communicators...

The April cover story in *Minnesota Medicine* on Dr. Michael Breen was informative and interesting. Included in the same issue were interviews with Dr. Thomas Shives and Dr. Paul Quie, both of whom are physician media personalities.

Unfortunately, you failed to pay recognition to one of the all-time radio physician personalities in this area. Dr. William O'Brien, I believe, was one of the first physicians in Minnesota to have a regularly featured radio show. His program, "Dr.'s House Call," ran from 1961 to 1968. I can still vividly recall his rich, baritone voice and the special way he could take complex medical issues and put them into layman's vernacular. He currently is with KLBB discussing medical issues. Several years ago, Dr. O'Brien was recognized by the Minnesota Medical Association for his excellence in communication.

Gary L. Grammens, Ph.D.,
M.D., F.A.C.P.
Physicians' Clinic
Riverside Medical Center
Minneapolis, Minnesota

CLIA Should Classify WBC Count as 'Waived'

A white blood cell (WBC) count is a basic and very frequently necessary laboratory test that has to be done immediately on many patients to make an accurate diagnosis and especially to differentiate diagnostic workup.

Some of the more basic indications are in differentiating between bacterial and viral infections. WBC count usually indicates the severity of an infection and the body's response to infection. It often indicates whether a treatment is effective in the course of illness, and it frequently reveals the presence of an asymptomatic illness, such as leukemia, that might not cause specific symptoms. In many cases, the WBC count is needed to substantiate or make the diagnosis or to decide whether other tests are necessary.

Hemoglobin, urinalysis, sedimentation rate, and white blood cell count are all basic laboratory tests. They probably tell us more about the status of a patient's health or disease than any other four tests. It appears that the CLIA '88 Final Rule categorizes the first three tests as waived from its \$600 registration fee, but does not include the white blood cell count in this category. I find this hard to understand, considering how frequently the test is needed.

To send every patient who needs a white blood cell count from a solo medical doctor's office or small medical office to another, sometimes distant, laboratory is unthinkable; nearly all of these patients are either acutely or chronically ill or have an illness that needs a rapid, accurate, differential diagnosis. Sending these patients to a another laboratory, even a few blocks away, will be detrimental to the patient's care; it

will add an unnecessary cost to medical care; and it will delay diagnosis, cause the patient aggravation, cause the doctor frustration, and cause anxiety for both.

The white blood cell count is basic, and it is necessary for the practice of quality care, but for a physician or several physicians to pay a \$600 registration fee and complete all the requisite paperwork just to be able to perform this one test is absurd. Because of this test's basic value, and the frequency with which it needs to be done to ensure quality medical care, the WBC count, like the other three basic tests, should be among CLIA's waived tests.

Palmer A. Peterson, M.D.
General Surgeon
Minneapolis, Minnesota

A Lab Consultant Comments

I have the following comments in response to Dr. Peterson's letter.

The CLIA '88 regulations categorize tests as waived, moderately complex, and highly complex. The "waived" category includes eight test methods, and the biannual fee for a certificate in this category is \$50. (See also "The CLIA '88 Final Rule: A Guide to Compliance," *Minnesota Medicine*, May 1992, page 25.)

The moderate- and high-complexity testing certificate fees are \$100, \$350, and \$600 every two years, depending upon quantity of tests performed and number of specialties covered. Currently, performing a WBC count would put a laboratory into the moderate- or high-complexity category.

Dr. Peterson's objection to a \$600 fee is not entirely substantiated, since his office would at least be required to pay \$50 and at most \$100, although it is true that additional requirements for personnel, quality control, and proficiency testing together with fees will increase costs.

The regulations indicate that Clinical Laboratory Improvement

Advisory Committees (CLIAAC) will be established to decide upon additions to the waived test category. We can only hope that the CLIAAC will be successful in modifying these lists and other standards so as to ensure patient access to care.

Over the past few months, I have had the opportunity to meet with physicians in private practice throughout the country and discuss the impact of CLIA '88. The universal response is one of apprehension regarding compliance with yet another set of government regulations that seem to confound a physician's ability to apply professional discretion in practicing medicine, while at the same time escalating the cost. This reaction is not new. Dr. Charles Mayo remarked in the *Journal of the American Medical Association* in 1919 that, "The government has dabbled in medical affairs at an enormous expense for what has been accomplished." Hospital and independent laboratories that have dealt with CLIA '67 and Medicare requirements for the past 25 years have survived this process and have improved their laboratory services as a result.

I would suggest that concerned physicians establish a dialogue with pathologists and laboratorians in their communities and profit from their experience. The aspects of these regulations that will ultimately benefit patient care should be emphasized over the short-term disruption they cause.

Rodney W. Forsman
Administrative Consultant
Mayo Laboratory Consulting
Rochester, Minnesota

Your Chance to Help!

Here's a chance to help a hospital in Livingston, Zambia. This hospital urgently needs equipment and supplies to provide basic health care to its people. The

Minnetonka/Plymouth Rotary is planning a medical and dental equipment shipment to Africa in mid-June 1992. Tons of goods

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What's old for you may be state of the art for Zambia. If you have any of these items and would like to donate them to this humanitarian project, please contact Tom Meyer at 612/476-1990. Rotary International and the Minnetonka/Plymouth rotarians thank you for your consideration.

*Tom Meyer, Chair,
Zambia Hospital Project
Minnetonka/Plymouth Rotary Club
Plymouth, Minnesota*



K. James Ehlen, M.D.
Chairman, CEO Medica

HEALTHRIGHT, FUTURE CHALLENGES

Although legislative debate has ended in Minnesota's first attempt to reform its health care system, providers and purchasers of health care are still debating the merits of the HealthRight bill.

Medica believes the legislation is an important first step toward meaningful reform. It provides access to health care for thousands of uninsured Minnesotans, it seeks to get a handle on rapidly escalating health care costs and it reforms some of the worst rating practices in the commercial insurance industry.

But, concerns about HealthRight remain. A provider tax—without explicit pass through provisions—does not equitably distribute the costs of the reform. The insurance reforms in many respects do not go far enough. And, aspects of the bill rely too heavily on public sector solutions.

Medica will continue to be an advocate of health care reform and will continue to work to improve HealthRight. We look forward to working with physicians and other health care leaders to shape future reforms to make quality health care more affordable and more accessible to all Minnesotans.

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Medical School of the '90s

Opening Doors to Diversity, Opportunity

Minnesota Medicine interviews Donald Robertson, Ph.D.

Medical schools have undergone periods of dramatic change during recent decades. In response to a call for more physicians, the 1960s brought enormous growth, with the number of medical schools increasing from 86 to 103 and the number of entering students increasing from 8,298 to 11,348 by 1970. Growth continued in the '70s but slowed in the '80s, with concern shifting from increasing the number of physicians to altering their distribution (see JAMA 1991;266:913).

Today, medical schools are concerned with increasing the proportion of women and minority students and encouraging more students to choose primary care. At the University of Minnesota, the percentage of women entering medical school increased from about 35 percent in 1981 to 48 percent in 1991. Such demographic shifts have created tremendous diversity, says Donald Robertson, Ph.D., assistant dean for admissions at the University of Minnesota Medical School. According to Dr. Robertson, not only are more women entering medical school than in past decades, but students are generally older and have more varied backgrounds—changes Robertson believes have created more interesting and capable classes.

In the following interview, Dr. Robertson also discusses the effect of debt load. According to the Association of American Medical Colleges, the average educational debt of medical school graduates nationwide was \$19,697 in 1981. By 1990, it reached \$45,841, a figure some believe is conservative. Money has become a significant issue for medical students, especially for those who have families to support, says Robertson, who believes financial concerns strongly influence medical students' specialty choices. Nonetheless, he says a number of students are choosing less lucrative specialties; more than half the university's medical residents are in primary care.

Overall, Dr. Robertson says, the changes occurring in medicine create advantages and opportunities.

Minnesota Medicine: Dr. Robertson, we'd like to talk to you about today's medical students, but first fill us in on your background—where you grew up, where you went to school, and when you assumed a role in admissions.



Donald Robertson, Ph.D.

"We're seeing tremendous diversity, which creates much more interesting and capable classes."

Robertson: I grew up in northern Minnesota. As a matter of fact, if I had been born 100 yards farther north, I would have been a Canadian. I attended school in a small town named Little Fork, and I received my undergraduate training at the University of Minnesota-Duluth. Subsequently, I taught science in the public schools for five years in Proctor, Minnesota. After five years, I returned to graduate school at the University of Minnesota's Twin Cities campus, where I received my Ph.D. in anatomy, and I have been at the university ever since. My role in admissions started about 13 or 14 years ago, when I was asked to serve on the Medical School Admissions Committee. I served on the committee for eight years, six of which I was the committee chair. After a one-year hiatus, I accepted the position as assistant dean for admissions.

The Admissions Process

Minnesota Medicine: How demanding is your position?

Robertson: I'm dean half time, and I retain my primary appointment in the Cell Biology and Neuroanatomy Department half time, where my primary responsibility is teaching. During the admissions season, the position is very demanding. It is time consuming simply to keep the process operational and, more important, to see applicants who are being considered or applicants who have been refused admittance. My work week averages about 50 hours during the admissions process.

Minnesota Medicine: How large is the Admissions Committee?

Robertson: It has 16 members selected from the medical school's executive faculty, with representatives from the Hennepin and Ramsey county medical societies and the fourth-year class of medical students.

Minnesota Medicine: How many interviews do you conduct in one season?

Robertson: This year we're conducting roughly 600 interviews.

Minnesota Medicine: How many interviews do you have with each applicant?

Robertson: We used to have two interviews for each applicant, but logistically it was getting almost impossible to get things rolling and keep them running smoothly, so we had to cut back to one interview. We didn't particularly want to do this, but we were forced to for the sake of expediency. When I say we've given 600 interviews in one season, I mean we've looked at about 600 different applicants whom we consider to be viable candidates for admission.

Minnesota Medicine: How does the admissions process work?

Robertson: All applications are put through a preliminary screening process, which is based largely on the student's available objective data. Once an application has passed this screening, the applicant is asked to come in for an interview and to submit names of people who are writing letters of evaluation. When the interview report and the letters have arrived, the application is given to two members of the committee, who review it in depth and present the applicant to the entire committee. Subsequent to the presentation and any ensuing questions and discussion, each committee member gives the applicant a numerical ranking. The rankings are averaged, and the applicant is placed within an overall scale.

The process just described is only one route through which people can apply to medical school. We also have what is known as the Advanced Admissions Program, which allows students to apply at the end of their sophomore year in undergraduate school. The screening requirement for this program is the achievement of an excellent GPA and the support of evaluators. Incidentally, those who are accepted through this program do not have to take the MCAT exam, which is required for all others.

We also have applicants to the M.D./Ph.D. program. These applicants must meet both the Ph.D. and the Medical School admissions criteria.

Shifting Demographics

Minnesota Medicine: I remember when the number of medical school applicants was about three for every available position. What are the numbers today?

Robertson: This year, we have 2,845 applicants for 185 spots, which is roughly a 15-to-1 ratio. This is a very considerable increase over five years ago, when we had only 786 applicants for an entering class of 196—a ratio of 4-to-1. The number of applicants has increased 362 percent in the past five years.

Minnesota Medicine: Do you think these numbers are similar around the country?

Robertson: We seem to have preceded the national increase by about two years. In other words, when the national numbers started to climb, we had already seen increases in the number of applicants for a couple years. We're starting to level off now.

Minnesota Medicine: How have medical school applicants' academic qualifications changed over the last five to 10 years or so?

Robertson: We are seeing a slight increase in the average GPA and in the MCAT scores. When looked at over a 10-year period, I'm not sure these differences are significant.

With respect to the applicants' backgrounds, we see amazing diversity. Over the last 10 years, there has been a shift in the proportion of science to non-science majors. We see many more non-science majors applying now, and the average science major seems to be incorporating more liberal arts courses into his or her college program.

Minnesota Medicine: What is the composition of your entering class in terms of sex, age, and race?

Robertson: Our entering class this year is 48 percent women. From the looks of it, we're going to be around 50/50 again next year. The range of ages within any of the current classes is considerable; last year the average age was 27.

With respect to minorities, we experienced a period of decline in the number of applicants from the various ethnic groups over a period of years. The decline pretty much reflected the national picture. Fortunately, over the last two to three years, the number of minority applicants has started to increase, and we hope to be able to attract more of these applicants to the University of Minnesota Medical School.

Minnesota Medicine: What percentage of your freshman class graduates?

Robertson: About 98 percent.

Minnesota Medicine: Back when I was in medical school, about the time World War II started, students were literally terrified of failing—many students were eliminated. I'm glad those days are gone.

Robertson: So are we! While a degree of concern is often an appropriate and effective motivational factor, the inculcation of an atmosphere of fear is counterproductive, in more ways than one. The failure of large numbers of students who were deemed capable enough to be selected for entry only indicates that there is something wrong with either the selection or the educational process, or both.

Minnesota Medicine: Back in my med school days, when we had little choice but to stay on track until we cleared all the obstacles, there was a remarkable similarity in the freshmen class and all through medical school.

Robertson: You put that very well—remarkable similarity. Now we're seeing tremendous diversity, which creates much more interesting and capable classes.

Problems Facing Medical Students

Minnesota Medicine: What are some of the problems medical students are confronted with today?

Robertson: I'm not sure that the problems faced by today's medical students are so much different from those of previous years; rather, there is a shifting of emphasis within the hierarchy of problems. Money to finance medical school remains a major source of concern for almost all medical students. Something that is perhaps different now is that many more of our students are married and have families to support.

Minnesota Medicine: I suspect this is related to the increased age of applicants. Why do you think the average age has increased to 27?

Robertson: From what I've been able to ascertain, a large number of people entertained the thought of going into medicine early in their careers but got sidetracked into other career paths for a number of reasons. With today's difficult economic times, there has been a certain degree of insecurity in those professions, and these people are going back to something they perceive to be more stable.

Changes to Medical School

Minnesota Medicine: Some years back, medical schools attempted to make some radical changes to their curricula. What's happening today?

Robertson: At the University of Minnesota Medical School, we went through some extensive revisions in the late '60s, including a lot of cutting, rearranging, and streamlining. Since that time, a number of alterations have been instituted as needed. Basically, however, there has been nothing substantive, with the exception of a new integrated course that was introduced into the basic science curriculum this past year.

Factors Influencing Specialty Choice

Minnesota Medicine: As far as residency, how many students are matched with their first choices?

Robertson: This past spring, 71.5 percent of the students were matched with their first choices. More than 80 percent were matched with their first or second choices.

Minnesota Medicine: Recently, I've noticed a number of articles in medical publications about what influences medical career choices. From your own observations, what do you think influences students' career choices—particularly whether they choose primary care or another specialty?

Robertson: A great number of factors influence students' ultimate career choices. Certainly, altruistic motivations

play a part, such as a desire to serve in medically underserved areas. However, I think reality is that money does play a part in the selection process—not because students want to go out and accumulate wealth, but, rather, because they want to repay their sizable debts in a timely and reasonable manner. This is only prudent time and resource management, like it or not.

Minnesota Medicine: In a letter to the editor in the April 8 issue of the *Journal of the American Medical Association*, Daniel Bernstein, M.D., of the Boston University School of Medicine, says data show no significant

association between debt and specialty choice at the school during the five years from 1986 to 1990. Do you think money is playing less of a role in specialty selection than in earlier years?

Robertson: I'm not sure about this. It would be nice to think so, and I do know a number of students who don't allow debt to influence specialty choice. I have observed this to be particularly true among some of the women students. Still, more and more of the students have family responsibilities

and are older, which does, to a certain degree, cause them to consider entering the more highly paid specialties.

Minnesota Medicine: Another factor, particularly for physicians with families, might be the time demands. Some specialties are orderly and predictable, while others are not. Pediatrics, family medicine, and internal medicine are particularly demanding.

Robertson: Certainly, this would be a factor.

Minnesota Medicine: A recent article in *American Medical News* said that policymakers and academics are trying to achieve a 50/50 mix of primary care residents and those in other specialties. What is the mix at the University of Minnesota?

Robertson: Over the past four years alone, the University of Minnesota has met or exceeded that ratio. This year, 55 percent of the graduating class is going into a primary care residency.

Minnesota Medicine: Do you look for applicants who plan to enter certain specialties, or, if you asked their preference, do you fear they would give you the answer they think you want to hear?

Robertson: I've heard it said that if one of the perceived "musts" for getting into medical school was learning to play the flute, every applicant would be a flutist. Some individuals come to medical school with preconceived ideas about the specialties they plan to choose, and some of them actually persist with the idea. More frequently, however, the students change their minds at least once as they pass through the various rotations. A very large number of students start school having no idea of what

area their primary interests are in. Currently, there is a great deal of talk about trying to predict who will ultimately end up in primary care, and I support the effort. However, I am not convinced such efforts will be successful.

Minnesota Medicine: The March 11 *JAMA* published a report on early predictors of career achievement in academic medicine. The article concluded that a combination of things, such as academic performance and research experience during medical school, leads students to follow a path in academics. Is there any way to predict which students are more apt to go into academic careers?

Robertson: There may be, in a very broad and general sense, some activities or combination of activities that indicate a student is at least leaning toward academic medicine and research. Again, one would have to be very careful in establishing criteria in attempting to predict. I think anyone who has worked with medical students can recall a number who appeared to be heading toward academic medicine but were lost to academia once they started

clinical rotations. The opposite holds true as well. Each student comes to medical school with his or her own unique set of interests and talents that, in many instances, the student has yet to discover. The discovery and development of these interests and talents as students progress through medical school primarily determine career choice.

Medicine's Prospects

Minnesota Medicine: Do you feel enthusiastic about the future of medicine? If I were a young physician now, I would be excited by the prospects medicine has to offer.

Robertson: There's a lot of gloom and doom being disseminated by the naysayers. Certainly, great changes are taking place, not all of which are particularly inspiring for those contemplating medicine as a career. However, the people I see applying to medical school are highly motivated, extremely capable, and exciting individuals who see opportunity in what is happening. I, personally, have great faith in them and in their ability to create something positive.

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Medical School Grads Reflect on Their Training

Pamela Hill Nettleton

I t's June, and across the country medical students are graduating and beginning their residencies. They are entering the never-static world of developing medical technology, evolving scientific knowledge, and changeable treatment options—to say nothing of the constantly shifting demands of the government and other third-party payers.

Add to this already daunting atmosphere the dropping annual income figures for physicians, the rising tuition costs for medical students, the prospect of staggering malpractice premiums, and a new 2 percent tax on Minnesota health care providers, and you might expect this year's crop of medical graduates to be an overwhelmed and disheartened bunch.

They're not. Aware of the clear challenges in today's health care environment, and familiar with the complaints of established physicians about differences between the '90s and the good old days, medical school graduates are still tremendously excited about what they are about to do.

Here in Minnesota, students enter medical school at one of three institutions—the University of Minnesota in Minneapolis, the University of Minnesota-Duluth, and Mayo Medical School in Rochester. (After two years, the UMD medical students transfer to the university's Twin Cities campus to complete their degrees.)

What brings them to medical school? According to three recent grads profiled here, nothing very different from what has attracted medical students year after year: acquiring the skills to help other people, gaining the ability to make meaningful contributions to community life and, for some, knowing and admiring their own family doctor.

Of course, that's not to say today's medical students are no different from their predecessors. For one thing, the demographics have changed; the medical school class of the '90s includes more women, students of color, older students, and parents. With this greater diversity has come a broader range of concerns as well, and medical schools have had to adapt by finding new ways to attract top students, keep them enthusiastic, help them to balance their personal lives with their medical training, and prepare them to deal with the demands of modern medicine.

Ronald Franks, M.D., dean of the University of

Minnesota-Duluth School of Medicine, notes a shift toward student-centered instructional methods to deal with the heavy course load.

"We rely less on lecture, more on interactive methods of learning," says Franks. "We're moving to more problem-based approaches, which helps strengthen the process of clinical problem solving. We offer students options for learning that we think will more closely match their future clinical practices."

Robert McCollister, M.D., associate dean of curriculum affairs at the University of Minnesota Medical School in Minneapolis, says he believes medical school has become more humane.

"Attention is being paid to a whole range of issues that might have seemed foreign to us years ago, but which are relevant to society's values and ethics today—students are concerned

for animal rights, for reasonable working and study hours, for their own protection from infectious disease, and for consideration of patients' rights and individual professional responsibility."

Paying for medical school is one concern that is perhaps more critical than ever for students, says Roger Harms, M.D., associate dean for student affairs at Mayo Medical School, which has a goal to offer all students full tuition scholarships by the year 2005.

"The cost of medical education has been increasing dramatically around the country," says Harms. "We are already offsetting tuition in some degree for every student. We hope to increase that and offset all tuition by the year 2005. This is important because the door to career choice can be closed to students simply due to financial considerations."

Harms adds that he hopes medical school is becoming a more positive experience than it used to be. "We're working with our future colleagues when we're working with medical students. They deserve to be nurtured toward excellence."

Are medical schools' efforts paying off? The three spring graduates profiled in the following pages seem to think so. These fledgling doctors reflect on their medical training and on how they selected their career paths. As their comments reveal, all three feel ready to face their next challenge—residency.

"We're working with our future colleagues when we're working with medical students."

—Roger Harms, M.D.

Djonggi Situmeang, Mayo Medical School

Djonggi (pronounced "John-gee") Situmeang was born in Indonesia and brought to the Midwest by his parents when he was 3 years old. He grew up in a family that values higher education—his father holds a Ph.D. in math and his mother, now deceased, was a chemist. Situmeang's first interest was in engineering, but he found his college math classes less than stimulating.

"I also wanted to teach," says Situmeang, "but I didn't feel that graduate education was what I wanted to pursue. I soon found out there was a lot of teaching involved in medicine. Patient education, sharing your knowledge as a physician with the patient, the family. In fact, 'doctor' means 'teacher' in Latin.

"I was also volunteering in the community, with Big Brothers, Cub Scouts, the Youth Association for Retarded Citizens. I found out it was important for me to work with people. Medicine offers me the chance to combine teaching and helping people with science."

Despite his plans to apply to medical school, Situmeang did not take all the typical pre-med courses. As he explains, "I wanted a liberal arts education. I took almost half my credits in theology and philosophy, in courses outside of science. It didn't prove to be detrimental to my career path—in fact, in practical applications as a physician, it might even be a helpful background."

Situmeang chose to enter medical school at Mayo because of its small size (40 students).

"Coming from a small school, I saw a benefit in that. I couldn't see myself doing well in a big school with large class sizes. It's also a very good school, with lots of opportunities for learning diverse things. One of my teachers once said to me, and it's true: 'Medical school is like drinking out of a fire hose. There are more opportunities there than you'll ever be able to take advantage of.' Mayo offers all the opportunities, yet keeps close tabs to see that you are satisfied with them."

Situmeang, now 24 years old, agrees that medical

school has changed in the last decade. "It's more humane than it used to be. The hours aren't as long, which is good for the patients and for the students—you can learn better when you're not sleep deprived. In some ways, the old horror stories about long hours and lots of work are still true. There's lots to learn, lots to read, lots of time

away from home. But still, I think it's very manageable. If you get your priorities right from the start—mine were my wife and myself—you can get through it a happier person, learning better." Settling on a specialty was hard because Situmeang found he liked everything. He chose primary care because it offers a little of each field.

"A family is a good indication of any turmoil in a patient. If the family's sick, the patient might be sick, and vice versa. I have a hard time isolating a person from their family and their surroundings—the entire picture should be considered to practice medicine well. For me, I think I can best achieve that ideal in family medicine," says Situmeang,

who begins a family practice residency in Mason City, Iowa, this summer.



PHOTO COURTESY OF MAYO CLINIC

"There's a greater sense of grace in medicine than there used to be. Physicians are starting to learn that they have to be whole people."

How large a part do financial considerations—reimbursement issues, paying off student debt, working with third-party payers—play in specialty selection?

"At least for me, lifestyle is the driving force behind the specialty decision, after my individual interest in a specialty. You can't avoid the paperwork and reimbursement headaches and details of being a doctor by controlling the specialties you consider. The only way to completely avoid those issues is to not go

into medicine at all."

Along with thinking medical school has become more humane, Situmeang believes physicians themselves are changing. "I think there's a greater sense of grace in medicine than there used to be. I think physicians are starting to learn that they have to be whole people, too, not just whole physicians. I'd like to be known not only as a good physician, but also as a good man, husband, and father."

Brenda Hurtt, *University of Minnesota-Duluth School of Medicine and University of Minnesota Medical School, Minneapolis*

Brenda Hurtt got married, put her husband through the seminary, and had a child before she went back to school at age 28 to complete her undergraduate degree. She didn't tell anyone her goal was medical school until she knew her grades were going to be good enough to apply.

"What if I flunked microbiology? This isn't the same as being a kid and having to explain bad grades to your parents. This is serious—I had to go back and face my entire congregation!" quips Hurtt. She didn't flunk microbiology, did get her degree, and was accepted into the University of Minnesota-Duluth School of Medicine.

"The day I was accepted, I went and pulled my daughter out of school and we danced in the hallway. 'We're going to medical school!'"

Being a minister's wife for years, Hurtt (who admits she doesn't have a patient-friendly name) accompanied her husband on many hospital and deathbed visits.

"I saw what he does, and I knew I wanted to stand on the other side of the bed. What he does is much more difficult—spiritual issues are much more what runs one's ultimate life. But now, I can take care of the body; I can enable people to help heal themselves."

"Part of the reason I went into medicine, and family practice, is that it's an extension of my role as mother. I love being a mother—but my daughter is going to grow up someday. I still want to have people I can take care of, people in whose lives I can effect change."

Hurtt's ties to small-town life are deep—she's always lived in a rural area, and it's there she wants to live and practice medicine. "If I'm going to be sick, give me rural America anytime over the finest technology you can offer," says Hurtt, who en-

tered medical school at UMD, partly because of its commitment to rural medicine and family practice, and completed the final two years with the rest of her class at the university's Twin Cities campus.

"Dying is better rural," says Hurtt. "[The physician] knows each patient, and their pastor, and their family. In rural America, the hearse parks out front, on the main drag, next to the school. In this town, you don't even see a hearse. Cemeteries aren't next door to churches, like they are in small towns."

It's the small, rural towns, Hurtt believes, that are most affected by the financial pressures that discourage physicians from choosing primary care. The inability to defer school loan payments until residency, for example, is one of many disincentives to family practice specialization, she feels.

"You either repay during residency, or you take forbearance and pay interest. I'd say the average debt in our class is \$60,000, and that's significant. Knowing that,

you have to choose a specialty that will allow you to repay it rapidly—and that's not family practice."

Despite the weighty debt load, Hurtt remains enthusiastic about medical education and her chosen field.

"I'm a working-class kid, and I got here. When I'm practicing in a community, I'm going into schools and telling kids, 'You don't have to be middle class, you don't have to be upper class, to go to college.' It wasn't a given for me to go to college, and it isn't a given for a lot of kids. But, gosh, if I can do it ... there are a lot of kids sitting out there, like me, who abso-

lutely look up to their family doctor. They need to know it's possible. I hope I can be like that for some kid."

For her residency, Hurtt will be going to LaCrosse, Wisconsin, where her husband will seek a position with a congregation, and her daughter will begin junior high.

"I'm very lucky to have their support, and I'm very lucky to get to go to work and do a job I love," says Hurtt. "How many people get to do that?"



PHOTO BY BRUCE BAIRD

"Spiritual issues are much more what run one's ultimate life. But now, I can take care of the body; I can enable people to help heal themselves."

Jon D. Cohen, University of Minnesota Medical School, Minneapolis

Before entering medical school at age 28, Jon Cohen was an entrepreneur of sorts. He grew up in Duluth, working at his father's television and stereo shop. After earning his undergraduate degree in political science, he opened his own contracting business specializing in customized home audio and video centers.

"I didn't think of college as vocational training," he says. "I just wanted a liberal arts background. I never considered the field of medicine, even though my older brother is a doctor up in northern Minnesota."

Although his business was going well, Cohen says he found it was becoming less challenging and interesting, and he just couldn't see himself installing electronics his whole life. He began to consider medicine as a career and traveled north to spend time with his brother, Lee Cohen, M.D.

"He took me to see patients at the clinic, at the hospital, on call at night with him—kind of what you do as a third-year medical student. I got to see how things were for a doctor, and I could see I could enjoy that kind of life."

Eventually, at age 26, with virtually none of the required science prerequisites, Cohen decided to pursue a career in medicine at the University of Minnesota Medical School. He had to complete an additional year and a half of course work and take the MCAT before he could even apply to medical school.

"Fortunately," he says, "I could continue to run my business and save money for tuition."

By working full time until he started medical school, and part time during medical school, Cohen was able to self-finance about half of his medical school expenses, which, he points out, have risen tremendously in recent years.

"My brother graduated from medical school in 1977 and was able to pay all of his expenses and tuition by working as an usher at the Guthrie Theater. At that time, tuition was about one-sixth the level it is now."

Although he had originally planned to train in family practice, an introduction to anesthesiology as a third-year medical student convinced him to change his course. "In the first two years of medical school, you have very little exposure to anesthesiology. I took a three-week

rotation in third-year, basically to learn the skills of intubation and airway management."

That choice, and some very positive experiences with residents and staff, led him to alter the direction of his career. "I had an especially good relationship with the residents and staff in the anesthesiology department. They were very supportive, very friendly, very helpful to me. Specialty choice can really be influenced by personal experiences that may arise simply from chance," says Cohen, who will be starting his internship this June in LaCrosse and will be spending another three years training in anesthesiology at the

Mayo Clinic.

"I found anesthesiology, and especially critical care, fascinating because of the underlying physiology you monitor and control during surgery. My [background in electronics] made me enjoy using the variety of electronic monitoring systems used to care for patients during surgery."

Cohen, his baby daughter, and his wife (whom Cohen describes as a "woman of enormous self-confidence who is, in fact, much smarter than I am") will move to LaCrosse while

Cohen completes his internship. Then they'll move to Rochester while he continues his training at Mayo.

"I look forward to that—I enjoy working with people. I remember people coming up to my brother on the street in Two Harbors and thanking him for being their doctor. I like the thought of that, of being the one who knows what to do in an emergency, of being confident enough to act in a life and death situation."

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Pamela Hill Nettleton is a free-lance writer, editor, and consultant who lives in Minneapolis.



PHOTO BY ROB LEVINE

"Specialty choice can really be influenced by personal experiences that may arise simply from chance."

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COVER STORY

HEALTHRIGHT

ILLUSTRATIONS BY CINDY LINDGREN



The Politics of HealthRight *Piecing It Together*

With the possible exception of the Northwest Airlines deal, no other legislative action has generated more public debate—measured by phone calls, faxes, letters, and visits to Minnesota lawmakers—than the unveiling and ultimate passage of HealthRight, Minnesota's new plan to expand access to health care.

By Thomas Allen

The intense debate drew the attention of *The New York Times*, *The Washington Post*, *The Chicago Tribune*, and even *The Lancet*. One unlucky ABC News crew found itself filming an all-night conference committee hearing that more closely resembled a slumber party than an exercise of political will and endurance.

The intensity of the debate and the close 70-64 final vote in the House of Representatives, however, may have belied the narrow gap between supporters and opponents of HealthRight. In many ways, support for and opposition to HealthRight were as much a function of semantics and emphasis as an indication of outright conflict. Everyone involved, including the bill's seven principle architects, agree the plan was—and still is—far from perfect. Even Gov. Carlson has stated that the bill will undoubtedly be modified for years to come—good news for the Minnesota Medical Association, which is committed to helping HealthRight succeed but feels the current bill has serious shortcomings.

From the beginning, the MMA opposed the bill, criticizing its limited coverage, the 2 percent tax on health services, the mandatory Medicare assignment for physicians, and the effect HealthRight would have on physician recruitment in rural Minnesota.

"In the aggregate, there were too many things that needed to be clarified and modified and improved that at that time we simply couldn't support the bill without those changes," explains Andrew J. K. Smith, M.D., chair of the MMA Board of Trustees.

Although most health care provider groups shared the same—or similar—concerns, their responses to the bill varied. The Minnesota Hospital Association, for example, said it would support the bill with changes. "It was more a difference of semantics," says John Kingrey, MHA senior vice president of government affairs. "We

enemy of Pediatrics, the Minnesota-American College of Physicians, and the Minnesota Nurses Association, chose to support the bill, emphasizing that, in spite of HealthRight's many problems, it was a step in the right direction and that changes could be made after it was passed into law.

"We looked at the same bill. We acknowledged the same problems. But we weighed them a bit differently," says Carolyn McKay, M.D., pediatrics academy chapter president and an MMA alternate delegate to the AMA. "We played out the Academy of Pediatrics' traditional role of being advocates for children."

It is unrealistic to expect the various groups involved to agree on all the points, argues Smith, because each represents different constituents with different points of view. "MMA's overall position was clearly to try to fix the bill in areas where it was not going to work."

The MMA, with its broader membership, was compelled to take a wider perspective of the bill and how it would affect the overall health care system in the state. "If we looked at the whole system of health care delivery, if we looked at what the bill was attempting to do by setting limits on expenditures and taking money out of the system to spread to insurance coverage for more people—which the economists said would increase demand for services without increasing the supply of resources, actually driving up costs as a result—if we looked at that big picture," says Smith, "we felt we had to oppose the bill."



**"We fought a good fight.
We made substantial
improvements to the bill."**

Andrew J. K. Smith, M.D.

supported the bill provided changes that addressed our concerns were made. The MMA opposed the bill until those changes were made. It's a pretty fine line."

Meanwhile, a coalition of health care provider groups, including the Minnesota Chapter of the American Acad-

Opposing HealthRight

But opposing a bill that had among its goals expanding access to health care and controlling costs had inherent pitfalls, including the risk of appearing self-serving. For that reason, Smith says, whenever representatives from the association spoke to the media, community groups, and others involved in the debate, they emphasized the association's long-standing support for universal access and cost control.

In fact, in 1990, the MMA formally adopted the position that access to basic health care is a right due all citizens, regardless of their ability to pay. The following year, the MMA actively participated in the debate over the Health Care Access bill (H.F. 2) and supported it with some reservations. And in January, two months before HealthRight was unveiled, the MMA released its "Principles for Health Care Access Reform," a position paper outlining eight principles that any universal access plan should be based upon. (See the January 1992 issue of

Minnesota Medicine, page 23.)

"We had a lot of ideas about these things, and, unfortunately, we felt that our ideas had not been listened too," Smith says.

Despite this history of support for universal access, some lawmakers and HealthRight advocates made polit-

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—Andrew J. K. Smith, M.D.

ical hay, portraying physicians opposed to HealthRight as the driving force behind a powerful and self-serving medical-industrial complex. A few editorial and letter writers picked up the theme and spread it around. And some members of the public ate it up.

But McKay says the media were unfair in their portrayal of the MMA and created more of a split between physicians than actually existed within the medical community. "I have absolutely no doubt that most of my colleagues in the MMA are headed in the right direction and that MMA's intent was appropriate. They were very articulate in pointing out what was good about HealthRight. But the way the story played out in the media emphasized the disagreements," says McKay.

"Whenever you come out opposing a bill as written, what comes across in the media is that opposition. If you come out supporting a bill, with reservations, what comes across is the support," says Dave Renner, senior lobbyist for the MMA. "But the legislators we talked with understood our position."

Sen. Linda Berglin, DFL-Minneapolis, one of the original seven architects of HealthRight, agrees that the association's stance on HealthRight and the subsequent grassroots lobbying effort didn't necessarily hurt the MMA politically. "I wouldn't credit damage to the MMA," she says, "but there were some physicians who came across as being unconcerned about the uninsured."

The primary reason for the perception of a disgruntled group of physicians, according to Smith, is that the association pushed for dramatic changes to HealthRight. "We fought as hard as we could to make this as good a health care access/cost-containment bill as possible," he said. "It's now significantly better than it was. There's probably more in the bill to be happy with than dissatisfied with."

The Fruits of Labor

Four days after HealthRight was unveiled it had moved unscathed through eight policy committees, a remarkable pace by anyone's standards. Word around the Capitol was that the tracks were greased and anyone not wanting to get hurt politically should not even attempt to amend HealthRight, let alone stop it. "It's a done deal," everyone was saying with either pride or grim resignation.

But two weeks later, inundated with faxes, phone calls, and visits from concerned physicians, many legislators began to question the wisdom of passing a health care access bill that was so bitterly opposed by health care providers. Amendments began to appear. Language was changed. Whole portions of the bill were stripped out and replaced.

In the House, despite the objections of Rep. Paul Ogren, DFL-Aitkin, chair of the House Tax Committee and one of the "Gang of Seven" HealthRight authors, a 91-42 vote replaced the provider tax with a broad-based surtax on income.

The Senate and the governor opposed the income tax approach, and the dispute threatened to sink HealthRight. The provider tax was eventually reinstated in the House-Senate conference committee, which led to some unprecedented politicking on the House floor during the final vote as HealthRight proponents rounded up the necessary support.

Although the provider tax was ultimately to be the financing mechanism for HealthRight, Smith believes

"The cost-containment portion of
the bill will only work if the
medical community brings its
creativity and expertise into it."

—Sen. Linda Berglin

the debate was not without value. "We do feel we accomplished something by pointing out the deficiencies in the provider tax," he says.

The 2 percent tax on hospitals becomes effective January 1, 1993, and physicians will be assessed the tax beginning January 1, 1994. Hospitals may pass on the cost of the tax to third-party payers during the first year, then a legislative oversight commission established by the bill will study the effect of the tax on providers. According to Renner, some legislators have already talked quietly, unofficially, about reintroducing the income tax proposal next session. (For a more complete description of the bill's funding mechanism, see the HealthRight summary on page 35.)

The MMA had more success changing other aspects of HealthRight. The final version of the bill stripped out

the certificate-of-need restrictions and replaced them with retrospective review for purchases costing more than \$500,000. If a purchase is determined to be inappropriate, the commissioner of health may impose a five-year probation, during which the provider is subject to certificate-of-need-type restrictions. "It's not nearly so problematic as it was in its original form," Smith says.

McKay describes the initial cost-control language as "extremely alarming" to many providers with legitimate concerns, but she says the current version lacks teeth. "I think the issue needs to be carefully examined. I don't think the resolution will make everyone happy," she says.

Physician representation on the various boards, committees, commissions, and task forces the bill creates also improved during the final weeks of the session. Two physicians, instead of one, will serve on the 25-member state Health Care Commission; one physician will be appointed by the MMA and the other, a rural physician, by the governor. Eight health care professionals will serve on the 15-member practice parameters committee and six on the 15-member data collection and analysis committee. And the MMA will be the educational peer review organization for physicians who deviate from the practice parameters.

"There are areas where we want more representation and there are areas where the Legislature has gone a long way in giving us fair representation," Smith says.

**"MMA's overall position
was clearly to try to fix the bill
in areas where it was not
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—Andrew J. K. Smith, M.D.

"I think it's a positive sign," says McKay, "but it depends an awful lot on who the physicians are."

Both McKay and Smith agree that the physician appointed by the MMA to the new Minnesota Health Care Commission should represent a broad medical perspective. "That individual is going to have to represent diverse interests, some of which may be conflicting," McKay says, "and he or she will have to be the ultimate negotiator."

As the HealthRight bill moved to the appropriations and finance committees, concern about its cost grew. After the Department of Human Services released projections that the cost of the program could reach \$1 billion by 1997, and the plan would insure just two-thirds of the currently uninsured, some business groups withdrew their support of HealthRight, and the authors were forced to scale back both the eligibility and the benefits package, cutting the cost estimates back to \$294 million in 1997 for a program that would now cover only one-third of Minnesota's uninsured.

Clearly, the scaled-back bill offered far less than universal access, which the MMA considered a serious flaw. The association's position has always been that access to health care should be mandatory and universal, and both McKay and Smith say they hope the state will eventually take that step. "Universal access is the only thing that makes sense," McKay argues.

Breaking Down Fences, Building Bridges

In mid-April and amid much fanfare, the governor's signature made HealthRight law. Because of the substantial improvements in the final version of HealthRight and in spite of lingering concerns about how the plan would function, the MMA announced its intention to help make HealthRight work in Minnesota and to improve it through future legislation.

"It is not our intention to continue to do battle with anyone," Smith says. "We would rather be part of the healing process and try to make HealthRight work."

McKay says the MMA's decision to work with HealthRight was "imminently wise," because physicians need to be involved in the process. "Physicians are the ones who deliver care and are aware of problems that politicians are not," she says.

The MMA's Renner agrees: "Physicians will have an opportunity to reshape the bill in upcoming legislative sessions. This is law now. There are still problems that need fixing, but it is a start. It is our hope that the Legislature will be open to our suggestions for improvements."

Berglin says she welcomes the MMA's decision to work with HealthRight rather than against it. "I have said all along that the cost-containment portion of the bill will only work if the medical community brings its creativity and expertise into it," she says. "I think physicians are in a good position to help us get where we want to go."

Rep. Lee Greenfield, DFL-Minneapolis, another of



the HealthRight authors, agrees. "This kind of legislation cannot work without the cooperation of the medical community and hospital community."

Everyone agrees HealthRight is not a one-shot deal. On the contrary, this kind of sweeping legislation will be amended and refined year after year. Calling for 34 major studies and reports, HealthRight set itself up for change. "As those studies come in, there may be some major changes," Renner says. "And you never know what a future Legislature is going to do."

"I think we'll be working on this thing for the next 10 years," states the hospital association's Kingrey.

Working on HealthRight

The HealthRight legislation creates at least 10 commissions, committees, boards, associations, and task forces (counting the four regional planning boards as one

"Physicians are the ones who
deliver care and are aware of
problems that politicians are not."

—Carolyn J. McKay, M.D.

entity), and there will be at least 20 physicians serving on them.

Smith doesn't anticipate much difficulty finding physicians to participate, but he does admit that there are a lot of seats to be filled. "We need some very dedicated people, and we're going to need a lot of them," Smith says. "We've already talked about how to get the local medical societies involved in the process, and we'll be discussing that further."

Physicians have the best opportunity to have an impact on data collection and practice parameter development, areas where they have the best representation—and perhaps the most at stake.

Despite concerns about HealthRight's underestimation of the complexity of data collection initiatives, McKay is optimistic about the development of practice parameters. She believes practice parameters could reduce the practice of defensive medicine by enabling physicians to feel less vulnerable to litigation. Under HealthRight, physicians who adhere to the established parameters would have something of a safe harbor from malpractice suits.

As a residual benefit, reducing inappropriate procedures could diminish the paper blizzard that results from prior authorization, utilization review, coding, and billing for these procedures, predicts McKay. "It has that potential. It just depends on how it is implemented. That's why physicians have to be involved."

Greenfield agrees: "If you take a careful look at HealthRight, you'll see that while there is government

involvement, government does not take over the practice of medicine. All these decisions will be based heavily on physicians' input and medically sound research and data, and made at the local level. The more physicians are involved, the better it will be."

Renner hopes Greenfield and McKay are right. He says physicians have been supportive of the idea of developing practice parameters and points to the MMA's involvement in the Minnesota Clinical Comparison and Assessment Project as evidence. "If they can be used in a positive sense as practice parameters and not in a negative sense as practice standards, then I think they can have a positive effect," he says.

Whether the practice parameters will be beneficial depends on what data are collected, how they are collected, and how they are used, which highlights one of the reasons physicians have to be involved in the process. "Our efforts will be focused on trying to provide accurate data so the Health Care Commission can make rational decisions on where the excess is coming from and where it isn't," says Smith.

Physicians don't have to wait for the commissions and committees to be named, says Berglin, who believes that some of the most significant cost control will come from health care providers' efforts to work together to deliver care more efficiently. Berglin encourages physicians and other health care providers to begin looking at collaborative efforts, sharing technology, and discussing ways to reduce administrative costs—steps that would allow physicians to act as gatekeepers to the health care system.

"There's a lot physicians can do acting on their own," she says. "I think once we get on the same wavelength that cost control is possible within the existing system, then we'll start to see some significant progress."

"Decisions will be based heavily
on physicians' input and medically
sound research and data."

—Rep. Lee Greenfield

Now that the MMA has made the commitment to work with the governor and the Legislature to help HealthRight succeed in Minnesota, Smith emphasizes that MMA members need to participate in improving what's become state law.

"We fought a good fight. We made substantial improvements to the bill," says Smith. "The bill still needs changes, but now it's time to make HealthRight what it was initially intended to be: a universal access bill that controls costs without destroying the infrastructure of the health care delivery system in Minnesota."

MM

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2. Guttormson NL, Bubrick MP. Mortality from ischemic colitis. *Dis Colon & Rectum*, to be published.
3. Chatterjee SN. Use of GOR-TEX grafts as vascular access procedure for chronic hemodialysis. Abstract of a paper submitted to the European Society for Artificial Organs Eighth Annual Meeting, Copenhagen, August, 1981.
4. Thompson NW. Thyroid and parathyroid. In: Welch KJ, Randolph JG, Ravitch MM, et al., eds. *Pediatric Surgery*, 4th ed. Chicago: Year Book Medical, 1986: vol 1, 522-33.

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A Physician's Ethical and Legal Obligations to Treat HIV-Infected Patients

A Report of the MMA Committee on Ethics and Medical-Legal Affairs

The Committee on Ethics and Medical-Legal Affairs presents this report in response to Resolution 31, adopted at the 1991 Minnesota Medical Association House of Delegates meeting. The resolution requests the MMA to study and establish a policy regarding a physician's ethical and legal obligations to treat patients with contagious diseases. Although the paper focuses on the physician's ethical and legal obligations to treat HIV-infected patients, many of the principles apply to other contagious diseases as well.

A Review of Physicians' Ethical Duties

An ethical principle of the American Medical Association (AMA) allows physicians to freely enter into or decline relationships with patients. Principle VI of the Principles of Medical Ethics states that "[a] physician shall, in the provision of appropriate patient care, except in emergencies, be free to choose whom to serve, with whom to associate and the environment in which to provide medical services."

The freedom to enter into or decline relationships with patients, however, does not allow physicians to refuse to see patients if such refusal violates anti-discrimination laws. An opinion from the AMA Council on Ethical and Judicial Affairs provides that "[p]hysicians who offer their services to the public may not decline to accept patients because of race, color, religion, national origin, or any other basis that would constitute illegal discrimination."

A physician who improperly declines to accept a patient on the basis of the patient's HIV serostatus is engaging in illegal discrimination. Minnesota state and federal anti-discrimination laws prohibit discrimination on the basis of disability, and HIV is defined as a disability under those laws.

Opinion 9.131 of the Council on Ethical and Judicial Affairs of the American Medical Association expresses the AMA's position on a physician's ethical obligation to treat HIV-infected patients. The opinion makes clear that a physician has an ethical duty to treat HIV-infected patients and provides in relevant part that, "A physician may not ethically refuse to treat a patient whose condition is within the physician's current realm of compe-

tence solely because the patient is seropositive for HIV. Persons who are seropositive should not be subjected to discrimination based on fear or prejudice. When physicians are unable to provide the services required by an HIV-infected patient, they should make appropriate referrals to those physicians or facilities equipped to provide such services."

This opinion is consistent with the AMA's traditional position that "when an epidemic prevails, a physician must continue his [or her] labors without regard to the risk to his [or her] own health."

According to Report 9 of the council, "That tradition must be maintained. A person who is afflicted with AIDS needs competent, compassionate treatment. Neither those who have the disease nor those who have been infected with the virus should be sub-

jected to discrimination based on fear or prejudice, least of all by members of the health care community."

Physicians who are legitimately unable to provide the services required by infected patients may make referrals to physicians equipped to provide such services. However, the defense of a physician's lack of clinical expertise in dealing with HIV will be hard to argue, says Larry Gostin, Harvard Law School professor and director of the American Society of Law and Medicine. In a January 27 *American Medical News* article, he says, "With more than one million people infected with the virus, physicians can no longer hide behind the lack of expertise argument. If they aren't competent to treat people with HIV, they should be."

AMA Trustee Nancy Dickey, M.D., agrees in the article that all primary care providers could become proficient at treating HIV patients with minimal training, although it would be more difficult in some specialty areas.

In summary, the AMA has taken the position that physicians may ethically enter into or decline relationships with patients at their discretion; however, it is unethical for physicians to refuse to see patients out of fear or prejudice, or if such refusal would violate anti-discrimination laws. Only physicians who legitimately lack the necessary expertise to treat HIV-infected patients will be able to refuse treatment on that basis.

continued

State and Federal Statutes

Minnesota Human Rights Act

A physician's refusal to treat an HIV-infected patient may violate the Minnesota Human Rights Act. This act makes it an unfair and discriminatory practice for a place of public accommodation to deny any person "the full and equal enjoyment of goods, services, facilities, privileges, advantages, and accommodations ... because of race, color, creed, religion, disability, national origin, or sex." Under Minnesota law, a physician's office constitutes a place of public accommodation, and HIV constitutes a disability.

A place of public accommodation must make reasonable accommodation for the known physical disability of a disabled person. The law lists several factors to be considered in determining whether an accommodation is reasonable. These factors include:

- the frequency and predictability with which members of the public will be served by the accommodation;
- the size of the business, including physical size, annual gross revenues, and number of employees;
- the extent to which disabled persons will be further served from the accommodation;
- the type of business, the nature and amount of costs, and the reasonableness of financing the accommodation; and
- the extent to which any persons may be adversely affected by the accommodation.

A court or administrative agency's determination of whether an accommodation is reasonable is fact-specific, with determinations made on a case-by-case basis. A reasonable accommodation is most likely one that makes reasonable business sense. If an accommodation would be so expensive that it would jeopardize the ability of an organization to stay in business, the accommodation may be unreasonable. For example, it may be argued that it is unreasonable to expect a physician to buy an extremely expensive piece of protective respiratory equipment in order to perform certain procedures that produce aerosolization of blood and tissue, if the cost of buying such equipment is prohibitively expensive. Other factors may be considered in the analysis, such as whether performance of the procedure without the equipment would create a significant risk of HIV transmission.

In summary, the Minnesota Human Rights Act protects an HIV-infected patient from improper discrimination and requires the physician to treat the patient unless the physician cannot make a reasonable accommodation to care for the patient.

Risk of HIV transmission to health care workers is a concern for physicians treating patients with HIV or AIDS. The Minnesota Department of Human Rights has held that universal precautions provide reasonable ac-

commodation and protect a physician and the physician's staff from transmission of HIV. In a case brought against a physician who refused to perform a dermabrasion on an HIV-infected patient, the department held that evidence failed to support the physician's argument that an exceptionally high risk of contagion to the physician and the physician's staff existed. The department relied on witness testimony that use of universal precautions during dermabrasion would reduce the possible risk of contagion to a minuscule level or to a risk of one in one million.

According to the witnesses, universal precautions should be used for all patients. Services provided to an identified infected person require no higher degree of care than what should be standard practice regarding every patient.

A physician may believe it is necessary to refuse treatment to an HIV-infected or AIDS patient because the procedure is medically contraindicated, for example, because of an increased risk of infection or prolonged healing. However, in the

dermabrasion case described above, the Minnesota Department of Human Rights also held that an HIV-infected patient was not at risk of possibly fatal post-operative infection, and, therefore, a physician did not have the right to refuse to treat a patient on these grounds. According to witness testimony, HIV infection does not mean a person's immune system is impaired or more susceptible to infection or disease. Many HIV-infected persons remain healthy for 10 to 15 years.

In another Minnesota case, a dentist who refused to treat an HIV-infected patient was recently ordered to pay the patient \$10,000 in damages for mental anguish and suffering and a civil penalty of \$5,000 to the commissioner of human rights. An administrative law judge in the Department of Human Rights found that the dentist's refusal to provide the patient with a routine cleaning and check-up constituted discrimination and violated the Human Rights Act. The dentist did not prove the patient had a disability that posed a serious threat to the health or safety of the patient or others in the given circumstances.

Federal Rehabilitation Act

Section 504 of the Rehabilitation Act of 1973 (Rehabilitation Act) prohibits discrimination against an otherwise qualified individual with a handicap solely by reason of the handicap. The act covers programs or activities that are conducted by federal agencies or that receive federal funds. The Rehabilitation Act contains four elements. First, the person claiming discriminatory treatment must be "handicapped" as defined by the act. Second, the person must be "otherwise qualified" for the equal treatment being sought. Third, the contested treatment must be "solely by reason of ... handicap." And fourth, the discrimination must occur in a pro-

"Persons who are
seropositive should
not be subjected
to discrimination
based on fear or
prejudice."

gram or activity conducted or funded by the federal government.

Person must be "handicapped": The Rehabilitation Act defines a "handicapped person" as "any person who (i) has a physical or mental impairment which substantially limits one or more of such person's major life activities, (ii) has a record of such impairment, or (iii) is regarded as having such impairment." The definition of a physical or mental impairment includes any physiological disorder or condition affecting the hemic or lymphatic system. Because HIV affects the hemic and lymphatic systems, if it substantially limits one or more of a person's major life activities, it is a handicap under the Rehabilitation Act.

In 1988, the United States Department of Justice, Office of Legal Counsel, opined in a memorandum that an asymptomatic HIV-infected person is protected from discrimination under the Rehabilitation Act, so long as the person is otherwise qualified for the program or activity with reasonable accommodation. The memorandum addressed whether HIV constitutes a handicap, and specifically, whether HIV substantially limits one or more of a person's major life activities. The department determined that HIV substantially limits one or more of life's activities and provided in relevant part that, "it is reasonable to conclude that the life activity of procreation—the fulfillment of the desire to conceive and bear healthy children—is substantially limited for an asymptomatic HIV-infected individual. ... There is little doubt that procreation is a major life activity and that the physical ability to engage in normal procreation—procreation free from fear of what the infection will do to one's child—is substantially limited once an individual is infected with the AIDS virus. ... Similarly, some courts can be expected to find a limitation of a major life activity in the fact that an asymptomatic HIV-infected individual's intimate relations are also likely to be affected by HIV infection."

The memorandum dismisses any notion that a patient must contract full-blown AIDS before a major life activity is limited; so long as the patient is HIV-infected, a major life activity is limited, and the patient is considered handicapped under the act.

In addition to the Department of Justice, courts have also interpreted the act to apply to contagious diseases. In *School Board v. Arline*, the U.S. Supreme Court held that the Rehabilitation Act prohibits discrimination based on a contagious disease. In *Arline*, a school teacher with tuberculosis was held to be protected by the act, and the case was remanded back to the district court to determine whether the teacher was otherwise qualified to teach. Since *Arline*, other courts have held that asymptomatic HIV-infected persons and persons with AIDS are handicapped within the Rehabilitation Act's definition of handicap.

Person must be "otherwise qualified": To be "otherwise qualified," patients must show they are qualified for treatment in spite of the handicap and the physician's decision not to treat. For example, a court may find an HIV-infected patient to be "otherwise qualified" for treatment if the patient demonstrates that his or her immune system is not suppressed and the risk of infection or prolonged healing is minuscule.

A federal district court has held that in determining whether a patient is "otherwise qualified," a physician can take into account the risks imposed—both to the patient and to the physician—by the prospect of surgery on an HIV-infected patient. However, if the physician concludes that risks exist, the physician must also consider whether it is possible to make reasonable accommodation to enable the patient to undergo treatment despite those risks.

Reportedly, in that case, *Glanz v. Vernick*, the court ultimately held in an unpublished decision that the patient who had AIDS and requested elective ear surgery failed to show that he was "otherwise qualified" for the surgery. Evidence demonstrated postoperative complications and that the ear surgery was unsuccessful when performed by another surgeon who did not know of the patient's AIDS status. In addition, the physician testified that he would not have performed the surgery had he known the patient had AIDS.

During court deliberations to determine whether a patient is not "otherwise qualified" because a procedure is medically contraindicated, the court will most likely defer to a physician's medical judgment only after looking at the record that shows why the procedure is medically contraindicated. In *Glanz*, the court held that deference to a physician's medical judgment without examining the underlying reasons "would completely eviscerate § 504's function of preventing discrimination against the disabled in the health-care context. A strict rule of deference would enable doctors to offer merely pretextual medical opinions to cover up discriminatory decisions."

Glanz demonstrates the importance of documenting the facts and underlying reasons for a physician's decision not to treat an HIV-infected or AIDS patient. If a physician refuses to treat a patient because the patient is not "otherwise qualified" for treatment due to a medical contraindication, e.g., risk of infection or prolonged healing, the physician should carefully document the facts and underlying reasons, such as evidence of the patient's suppressed immune status. Consultation with other medical professionals is strongly recommended to resolve questions concerning medical contraindications. If the physician believes there is adequate reason to refuse treatment, the physician should consult with an institutional ethics committee and legal counsel to ensure that refusal does not violate AMA ethical principle or opin-

"It is unethical for physicians to refuse to see patients if such refusal would violate anti-discrimination laws."

ions or the anti-discrimination laws.

Exclusion must be "solely by reason of handicap": A physician who refuses to care for an HIV-infected patient for a legitimate reason, i.e., because medical treatment is contraindicated, is not excluding treatment solely by reason of handicap. Although the court in *Glanz* did not address this specific issue, the court found in favor of the provider once it was determined that treatment was refused because the patient was not otherwise qualified, i.e., treatment was medically contraindicated.

Discrimination must occur in a federally conducted or funded program: The Rehabilitation Act has been held to apply to programs receiving federal financial assistance, including Medicare Part A and Medicaid.

In *Glanz*, the court found that the hospital where services were refused, not the physician who refused to perform the services, would be liable if discrimination was found under the Rehabilitation Act. To support its position, the court cited *Grove City College*, in which the Supreme Court indicated that anti-discrimination provisions of civil rights legislation for programs receiving federal financial assistance must be program-specific. "The application of § 504 ... must thus be limited to the relevant program receiving federal funds in the form of Medicare or Medicaid payments. Dr. Vernick participates in at least two distinct 'programs': his private medical practice, in which he personally receives federal funds for treating some patients, and ... [the hospital's] ENT Clinic, in which he is employed in a resident teaching capacity. The latter is the relevant program in the case at bar."

The court further reasoned that "[b]y limiting coverage to recipients, Congress imposes the obligations of § 504 upon those who are in a position to accept or reject those obligations as part of the decision whether or not to receive federal funds."

Section 504 applies even if the particular procedure refused is not federally funded. Once a service is a program or activity for purposes of § 504, the program cannot discriminate against any handicapped individual regardless of whether the individual receives Medicaid benefits or not.

Americans with Disabilities Act of 1990

The Americans with Disabilities Act of 1990 (ADA) is intended to "provide a clear and comprehensive national mandate for the elimination of discrimination against individuals with disabilities." It applies to all places of public accommodation regardless of whether federal funds are received. The ADA contains essentially the same standards and prohibitions as the Rehabilitation Act. Under the ADA, hospitals and physicians' offices are defined as places of public accommodation. The legislative history of the ADA identifies HIV infection as

a disability under the act. Hospital medical staff members may be considered agents of the hospital and, as such, may be prohibited from discriminating against hospital patients.

Conclusions

The following points summarize a physician's ethical and legal obligations to treat HIV-infected patients:

- According to AMA ethical principle and opinions, physicians may ethically enter into or decline relationships with patients at their discretion; however, it is unethical for physicians to refuse to see patients out of fear or prejudice, or if such refusal would violate anti-discrimination laws.

- The Minnesota Human Rights Act prohibits a physician from denying any person medical treatment because of a disability, including HIV infection. A physician must make reasonable accommodation for the patient's known physical disability.

- Section 504 of the Rehabilitation Act of 1973 prohibits discrimination against an otherwise qualified individual with a handicap solely by reason of the handicap in programs or activities that are conducted by federal agencies or that receive federal funds. The physician must consider whether it is possible to make reason-

able accommodation to enable a patient who is not otherwise qualified to undergo treatment.

- The Americans with Disabilities Act of 1990 prohibits discrimination against individuals with disabilities, including HIV infection, and applies to hospitals and physicians' offices regardless of whether federal funds are received. The ADA contains essentially the same standards and prohibitions as § 504 of the Rehabilitation Act of 1973.

- Pursuant to AMA ethical principle and opinions, as well as state and federal anti-discrimination laws, physicians may refuse to treat HIV-infected patients for three reasons, provided the reasons can be substantiated by fact: 1) the physician legitimately fails to have the necessary expertise to treat the condition of the HIV-infected patient; 2) treatment is medically contraindicated, e.g., there exists a risk of infection or prolonged healing; or 3) a significant risk of infection to health care workers exists.

- The three reasons for refusal to treat HIV-infected patients, enumerated above, are rarely adequate reasons for refusal to treat because: 1) with more than one million people infected with HIV and training requirements minimal, primary care physicians will be expected to become proficient at treating HIV-infected patients; 2) HIV infection alone does not necessarily mean that an individual's immune system is suppressed; and 3) risk of infection to health care workers can be sufficiently minimized with use of universal precautions in most instances.

"The Minnesota
Human Rights Act
prohibits a physician
from denying any
person medical
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disability, including
HIV infection."

Recommendations

The MMA Committee on Ethics and Medical-Legal Affairs recommends that:

1. the MMA Board of Trustees adopt as MMA policy the AMA ethical principle and opinions referenced in this report;

2. the MMA recommend to physicians who believe it is necessary to refuse to treat HIV-infected patients to carefully document the facts and underlying reasons for their decisions not to treat, and that the MMA strongly recommend that these physicians consult with other medical professionals with regard to questions concerning medical contraindications or risk of transmission of infection. If the physician believes there is adequate reason to refuse treatment, the physician should consult with an institutional ethics committee and legal counsel to ensure that refusal does not violate AMA ethical principle or opinions or the anti-discrimination laws; and

3. the MMA educate physicians about their ethical and legal obligations to treat patients infected with HIV through publication of this report in *Minnesota Medicine*. MM

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For a copy of the complete MMA report, including footnotes and references, call Pat Biersach at the MMA, 612/378-1875.

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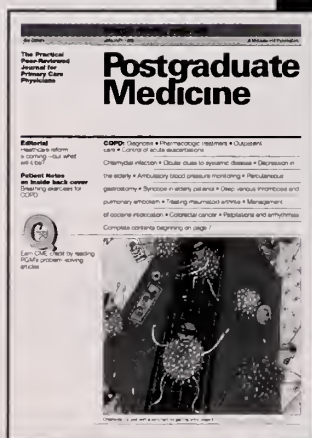
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Angioedema: Angioedema of the face, extremities, lips, tongue, glottis, and larynx has been reported in patients treated with ACE inhibitors and has been seen in 0.1% of patients receiving ACCUPRIL. Angioedema associated with laryngeal edema can be fatal. If laryngeal stridor or angioedema of the face, tongue, or glottis occurs, treatment with ACCUPRIL should be discontinued immediately, the patient treated in accordance with accepted medical care, and carefully observed until the swelling disappears. In instances where swelling is confined to the face and lips, the condition generally resolves without treatment; antihistamines may be useful in relieving symptoms. **Where there is involvement of the tongue, glottis, or larynx likely to cause airway obstruction, emergency therapy including, but not limited to, subcutaneous epinephrine solution 1:1000 (0.3 to 0.5 mL) should be promptly administered (see ADVERSE REACTIONS).**

Hypotension: Symptomatic hypotension was rarely seen in uncomplicated hypertensive patients treated with ACCUPRIL but, as with other ACE inhibitors, it is a possible consequence of therapy in salt/volume depleted patients, such as those previously treated with diuretics or dietary salt restriction or who are on dialysis (see PRECAUTIONS, DRUG INTERACTIONS, and ADVERSE REACTIONS). In controlled studies, syncope was observed in 0.4% of patients (N = 3203); this incidence was similar to that observed for captopril (1%) and enalapril (0.8%).

In patients with concomitant congestive heart failure, with or without associated renal insufficiency, ACE inhibitor therapy may cause excessive hypotension, which may be associated with oliguria or azotemia and, rarely, with acute renal failure and death. In such patients, ACCUPRIL therapy should be started at the recommended dose under close medical supervision. These patients should be followed closely for the first 2 weeks of treatment and whenever the dosage of antihypertensive medication is increased (see DOSAGE AND ADMINISTRATION).

If symptomatic hypotension occurs, the patient should be placed in the supine position and, if necessary, normal saline may be administered intravenously. A transient hypotensive response is not a contraindication to further doses; however, lower doses of ACCUPRIL or reduced concomitant diuretic therapy should be considered.

Neutropenia/Agranulocytosis: Another ACE inhibitor, captopril, has been shown to cause agranulocytosis and bone marrow depression rarely in patients with uncomplicated hypertension, but more frequently in patients with renal impairment, especially if they also have a collagen vascular disease such as systemic lupus erythematosus or scleroderma. Agranulocytosis did not occur during ACCUPRIL treatment in one patient with a history of neutropenia during previous captopril therapy. Available data from clinical trials of ACCUPRIL are insufficient to show that, in patients without prior reactions to other ACE inhibitors, ACCUPRIL does not cause agranulocytosis at similar rates. As with other ACE inhibitors, periodic monitoring of white blood cell counts in patients with collagen vascular disease and/or renal disease should be considered.

Fetal/Neonatal Morbidity and Mortality: ACE inhibitors can cause fetal and neonatal morbidity and death when administered to pregnant women. Several dozen cases have been reported in the world literature. When pregnancy is detected, ACE inhibitors should be discontinued as soon as possible.

The use of ACE inhibitors during the second and third trimesters of pregnancy has been associated with fetal and neonatal injury, including hypotension, neonatal skull hypoplasia, anuria, reversible or irreversible renal failure, and death. Oligohydramnios has also been reported, presumably resulting from decreased fetal renal function; oligohydramnios in this setting has been associated with fetal limb contractures, craniofacial deformation, and hypoplastic lung development. Prematurity, intrauterine growth retardation, and patent ductus arteriosus have also been reported, although it is not clear whether these occurrences were due to the ACE inhibitor exposure.

These adverse effects do not appear to have resulted from intrauterine ACE inhibitor exposure that has been limited to the first trimester. Mothers whose embryos and fetuses are exposed to ACE inhibitors only during the first trimester should be so informed. Nonetheless, when patients become pregnant, physicians should make every effort to discontinue the use of ACCUPRIL as soon as possible.

Rarely (probably less often than once in every thousand pregnancies), no alternative to ACE inhibitors will be found. In these rare cases, the mothers should be apprised of the potential hazards to their fetuses, and serial ultrasound examinations should be performed to assess the intraamniotic environment.

If oligohydramnios is observed, ACCUPRIL should be discontinued unless it is considered life-saving for the mother. Contraction stress testing (CST), a non-stress test (NST), or biophysical profiling (BPP) may be appropriate, depending upon the week of pregnancy. Patients and physicians should be aware, however, that oligohydramnios may not appear until after the fetus has sustained irreversible injury.

Infants with histories of *in utero* exposure to ACE inhibitors should be closely observed for hypotension, oliguria, and hyperkalemia. If oliguria occurs, attention should be directed toward support of blood pressure and renal perfusion. Exchange transfusion or dialysis may be required as a means of reversing hypotension and/or substituting for disordered renal function. Removal of ACCUPRIL, which crosses the placenta, from the neonatal circulation is not significantly accelerated by these means. No teratogenic effects of ACCUPRIL were seen in studies of pregnant rats and rabbits. On a mg/kg basis, the doses used were up to 180 times (in rats) and one time (in rabbits) the maximum recommended human dose.

PRECAUTIONS

General

Impaired renal function: As a consequence of inhibiting the renin-angiotensin-aldosterone system, changes in renal function may be anticipated in susceptible individuals. In patients with severe heart failure whose renal function may depend on the activity of the renin-angiotensin-aldosterone system, treatment with ACE inhibitors, including ACCUPRIL, may be associated with oliguria and/or progressive azotemia and rarely acute renal failure and/or death.

In clinical studies in hypertensive patients with unilateral or bilateral renal artery stenosis, increases in blood urea nitrogen and serum creatinine have been observed in some patients following ACE inhibitor therapy. These increases were almost always reversible upon discontinuation of the ACE inhibitor and/or diuretic therapy. In such patients, renal function should be monitored during the first few weeks of therapy.

Some hypertensive patients with no apparent preexisting renal vascular disease have developed increases in blood urea and serum creatinine, usually minor and transient, especially when ACCUPRIL has been given concomitantly with a diuretic. This is more likely to occur in patients with preexisting renal impairment. Dosage reduction and/or discontinuation of any diuretic and/or ACCUPRIL may be required.

Evaluation of hypertensive patients should always include assessment of renal function (see DOSAGE AND ADMINISTRATION).

Hyperkalemia and potassium-sparing diuretics: In clinical trials, hyperkalemia (serum potassium ≥ 5.8 mmol/L) occurred in approximately 2% of patients receiving ACCUPRIL. In most cases, elevated serum potassium levels were isolated values which resolved despite continued therapy. Less than 0.1% of patients discontinued therapy due to hyperkalemia. Risk factors for the development of hyperkalemia include renal insufficiency, diabetes mellitus, and the concomitant use of potassium-sparing diuretics, potassium supplements, and/or potassium-containing salt substitutes, which should be used cautiously, if at all, with ACCUPRIL (see PRECAUTIONS, Drug Interactions).

Cough: Cough has been reported with the use of ACE inhibitors. Characteristically, the cough is nonproductive, persistent, and resolves after discontinuation of therapy. ACE inhibitor-induced cough should be considered as part of the differential diagnosis of cough.

Surgery/anesthesia: In patients undergoing major surgery or during anesthesia with agents that produce hypotension, ACCUPRIL will block angiotensin II formation secondary to compensatory renin release. If hypotension occurs and is considered to be due to this mechanism, it can be corrected by volume expansion.

Information for Patients

Pregnancy: Female patients of childbearing age should be told about the consequences of second- and third-trimester exposure to ACE inhibitors, and they should also be told that these consequences do not appear to have resulted from intrauterine ACE-inhibitor exposure that has been limited to the first trimester. These patients should be asked to report pregnancies to their physicians as soon as possible.

Angioedema: Angioedema, including laryngeal edema, can occur with treatment with ACE inhibitors, especially following the first dose. Patients should be so advised and told to report immediately any signs or symptoms suggesting angioedema (swelling of face, extremities, eyes, lips, tongue, difficulty in swallowing or breathing) and to stop taking the drug until they have consulted with their physician (see WARNINGS).

Symptomatic hypotension: Patients should be cautioned that lightheadedness can occur, especially during the first few days of ACCUPRIL therapy, and that it should be reported to a physician. If actual syncope occurs, patients should be told to not take the drug until they have consulted with their physician (see WARNINGS).

All patients should be cautioned that inadequate fluid intake or excessive perspiration, diarrhea, or vomiting can lead to an

Accupril® (Quinapril Hydrochloride Tablets)

excessive fall in blood pressure because of reduction in fluid volume, with the same consequences of lightheadedness and possible syncope.

Patients planning to undergo any surgery and/or anesthesia should be told to inform their physician that they are taking an ACE inhibitor.

Hyperkalemia: Patients should be told not to use potassium supplements or salt substitutes containing potassium without consulting their physician (see PRECAUTIONS).

Neutropenia: Patients should be told to report promptly any indication of infection (eg, sore throat, fever) which could be a sign of neutropenia.

NOTE: As with many other drugs, certain advice to patients being treated with ACCUPRIL is warranted. This information is intended to aid in the safe and effective use of this medication. It is not a disclosure of all possible adverse or intended effects.

Drug Interactions

Concomitant diuretic therapy: As with other ACE inhibitors, patients on diuretics, especially those on recently instituted diuretic therapy, may occasionally experience an excessive reduction of blood pressure after initiation of therapy with ACCUPRIL. The possibility of hypotensive effects with ACCUPRIL may be minimized by either discontinuing the diuretic or cautiously increasing salt intake prior to initiation of treatment with ACCUPRIL. If it is not possible to discontinue the diuretic, the starting dose of quinapril should be reduced (see DOSAGE AND ADMINISTRATION).

Agents increasing serum potassium: Quinapril can attenuate potassium loss caused by thiazide diuretics and increase serum potassium when used alone. If concomitant therapy of ACCUPRIL with potassium-sparing diuretics (eg, spironolactone, triamterene, or amiloride), potassium supplements, or potassium-containing salt substitutes is indicated, they should be used with caution along with appropriate monitoring of serum potassium (see PRECAUTIONS).

Tetracycline and other drugs that interact with magnesium: Simultaneous administration of tetracycline with ACCUPRIL reduced the absorption of tetracycline by approximately 28% to 37%, possibly due to the high magnesium content in ACCUPRIL tablets. This interaction should be considered if coprescribing ACCUPRIL and tetracycline or other drugs that interact with magnesium.

Lithium: Increased serum lithium levels and symptoms of lithium toxicity have been reported in patients receiving concomitant lithium and ACE inhibitor therapy. These drugs should be co-administered with caution, and frequent monitoring of serum lithium levels is recommended. If a diuretic is also used, it may increase the risk of lithium toxicity.

Other agents: Drug interaction studies of ACCUPRIL with other agents showed:

- Multiple dose therapy with propranolol or cimetidine has no effect on the pharmacokinetics of single doses of ACCUPRIL.
- The anticoagulant effect of a single dose of warfarin (measured by prothrombin time) was not significantly changed by quinapril coadministration twice-daily.
- ACCUPRIL treatment did not affect the pharmacokinetics of digoxin.
- No pharmacokinetic interaction was observed when single doses of ACCUPRIL and hydrochlorothiazide were administered concomitantly.

Carcinogenesis, Mutagenesis, Impairment of Fertility

Quinapril hydrochloride was not carcinogenic in mice or rats when given in doses up to 75 or 100 mg/kg/day (50 to 60 times the maximum human daily dose, respectively, on a mg/kg basis and 3.8 to 10 times the maximum human daily dose when based on a mg/m² basis) for 104 weeks. Female rats given the highest dose level had an increased incidence of mesenteric lymph node hemangiomas and skin/subcutaneous lipomas. Neither quinapril nor quinapril were mutagenic in the Ames bacterial assay with or without metabolic activation. Quinapril was also negative in the following genetic toxicology studies: *in vitro* mammalian cell point mutation, sister chromatid exchange in cultured mammalian cells, micronucleus test with mice, *in vitro* chromosome aberration with V79 cultured lung cells, and in an *in vivo* cytogenetic study with rat bone marrow. There were no adverse effects on fertility or reproduction in rats at doses up to 100 mg/kg/day (60 and 10 times the maximum daily human dose when based on mg/kg and mg/m², respectively).

Pregnancy

Pregnancy Categories C (first trimester) and D (second and third trimesters): See WARNINGS, Fetal/Neonatal Morbidity and Mortality.

Nursing Mothers

It is not known if quinapril or its metabolites are secreted in human milk. Quinapril is secreted to a limited extent, however, in human milk, caution should be exercised when ACCUPRIL is given to a nursing mother.

Geriatric Use

Elderly patients exhibited increased area under the plasma concentration time curve (AUC) and peak levels for quinapril compared to values observed in younger patients, this appeared to relate to decreased renal function rather than to age itself. In controlled and uncontrolled studies of ACCUPRIL where 918 (21%) patients were 65 years and older, no overall differences in effectiveness or safety were observed between older and younger patients. However, greater sensitivity of some older individuals cannot be ruled out.

Pediatric Use

The safety and effectiveness of ACCUPRIL in children have not been established.

ADVERSE REACTIONS

ACCUPRIL has been evaluated for safety in 4960 subjects and patients. Of these, 3203 patients, including 655 elderly patients participated in controlled clinical trials. ACCUPRIL has been evaluated for long-term safety in over 1400 patients treated for 1 year or more.

Adverse experiences were usually mild and transient.

Discontinuation of therapy because of adverse events was required in 4.7% of patients treated with ACCUPRIL in placebo-controlled hypertension trials.

Adverse experiences probably or possibly related to therapy or of unknown relationship to therapy occurring in 1% or more of 1563 patients in placebo-controlled hypertension trials who were treated with ACCUPRIL are shown below.

	Adverse Events in Placebo-Controlled Trials	
	ACCUPRIL (N = 1563) Incidence (Discontinuation)	Placebo (N = 579) Incidence (Discontinuation)
Headache	5.6 (0.7)	10.9 (0.7)
Dizziness	3.9 (0.8)	2.6 (0.2)
Fatigue	2.6 (0.3)	1.0
Coughing	2.0 (0.5)	0.0
Nausea/Vomiting	1.4 (0.3)	1.9 (0.2)
Abdominal Pain	1.0 (0.2)	0.7

See PRECAUTIONS, Cough.

Clinical adverse experiences probably or possibly related, or of uncertain relationship to therapy, occurring in 0.5% to 1.0% (except as noted) of the patients treated with ACCUPRIL (with or without concomitant diuretic) in controlled or uncontrolled trials (N = 4397) and less frequent, clinically significant events seen in clinical trials or post-marketing experience (the rarer even in italics) include (listed by body system):

General: back pain, malaise

Cardiovascular: palpitation, vasodilation, tachycardia, heart failure, hyperkalemia, myocardial infarction, cerebrovascular accident, hypertensive crisis, angina pectoris, orthostatic hypotension, cardiac rhythm disturbances

Gastrointestinal: dry mouth or throat, constipation, gastrointestinal hemorrhage, pancreatitis, abnormal liver function tests

Nervous/Psychiatric: somnolence, vertigo, syncope, nervousness, depression

Integumentary: increased sweating, pruritus, exfoliative dermatitis, photosensitivity reaction

Urogenital: acute renal failure

Other: amblyopia, pharyngitis, sinusitis, bronchitis, agranulocytosis, thrombocytopenia

Fetal/Neonatal Morbidity and Mortality

See WARNINGS, Fetal/Neonatal Morbidity and Mortality.

Angioedema: angioedema has been reported in patients receiving ACCUPRIL (0.1%). Angioedema associated with laryngeal edema may be fatal. If angioedema of the face, extremities, lips, tongue, glottis, and/or larynx occurs, treatment with ACCUPRIL should be discontinued and appropriate therapy instituted immediately. (See WARNINGS.)

Clinical Laboratory Test Findings

Hematology: (See PRECAUTIONS)

Hyperkalemia: (See PRECAUTIONS)

Creatinine and blood urea nitrogen: Increases (T1 25 times the upper limit of normal) in serum creatinine and blood urea nitrogen were observed in 2% and 2%, respectively, of patients treated with ACCUPRIL alone. Increases are more likely to occur in patients receiving concomitant diuretic therapy than in those on ACCUPRIL alone. These increases often remit on continuing

*In some patients, the antihypertensive effect may diminish toward the end of the once-daily dosing interval. In such patients, an increase in dosage or twice-daily administration may be warranted.



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HealthRight's Mandate for Change

Keith J. Halleland, J.D., and S. Olivia Mastry, J.D.

During its most recent session, the Minnesota Legislature passed a comprehensive health care access bill designed to provide affordable health insurance to uninsured and underinsured Minnesotans. The bill also carries with it the promise to contain—and even reduce—spiraling health care costs. Can these seemingly divergent goals be accomplished at the same time? At this early stage in the legislation's development, even the most optimistic may doubt whether the new law will be successful. Yet, there is no doubt that HealthRight is, at the very least, a vehicle for change. Just how much change the new law will bring to Minnesota's health care delivery system remains to be seen.

This article summarizes the key components of HealthRight and identifies the issues likely to arise as Minnesota pursues its goals of containing health care costs and providing affordable health insurance for all Minnesotans.

Governing Structure

HealthRight is a complex bill that attempts to rectify problems in Minnesota's health care industry. The bill relies on an intricate governing structure and funding mechanism to achieve its objectives. Essentially, HealthRight will be implemented through a series of commissions and boards, each of which is assigned different responsibilities and goals. The central governing commission is the Minnesota Health Care Commission. In early versions of the bill, the commission was essentially a new state agency with direct reporting authority to the governor. Eventually, the Legislature placed the commission within the jurisdiction of the commissioner of health. Under the final version of the bill, the commis-

sion acts only as an advisory body to the commissioner of health, with one important exception: by January 15, 1993, the commission must submit a plan to the Legislature and the governor for slowing the growth in health

"The Legislature has mandated dramatic change in Minnesota's health care delivery system."

care spending by at least 10 percent per year, beginning July 1, 1993.

The 25-member Minnesota Health Care Commission will be composed of the following:

- four members representing health plan companies;
- six members representing health care providers (one member appointed by the Minnesota Medical Association, one by the Minnesota Nurses Association, one by the Minnesota Hospital Association, one rural physician appointed by the governor, and two members appointed by the governor to represent providers other than hospitals, physicians, and nurses);
- four members representing employers;
- five consumer members;
- three labor union representatives;
- the commissioners of commerce, employee relations, and human services.

The governor will select a chair

from among the governor-appointed members.

The bill also creates a Legislative Oversight Commission charged with reviewing the activities of the commissioner of health, the new Health Care Commission, and any other agencies involved in implementing and administering HealthRight. This commission will consist of five members of both the House and Senate. The Legislative Oversight Commission is also responsible for obtaining any necessary federal approvals or waivers, and most important, it is required to study and report on the "long-term" stability of HealthRight's revenue sources. A preliminary report and recommendation to the Legislature is due by January 15, 1993.

In addition to the Health Care Commission and the Legislative Oversight Commission, the bill creates several "regional coordinating boards," each consisting of 16 members. These boards may make recommendations to the commissioner of health regarding the following issues:

1. whether the commissioner should approve voluntary agreements between providers that might otherwise constitute a violation of state antitrust laws;
2. whether the commissioner should approve major capital expenditures or the introduction of new technologies that are being proposed or considered by providers; and
3. whether the commissioner should take other action to improve the affordability, accessibility, and quality of health in the region and throughout the state.

The regional boards may also undertake educational activities relating to cost containment, health care access, and quality of care.

At the regional level, HealthRight also suggests establishing overall "regional coordinating organizations," the structure of which may vary by region. HealthRight does not specifically describe how such organizations are to be established. The bill merely states that providers in the region should begin formulating a plan to organize the "delivery networks or systems" within the region to accomplish HealthRight's objectives.

Finally, HealthRight requires that the Health Care Commission establish an advisory committee known as the Health Planning Advisory Committee. The advisory committee will make recommendations to the commission regarding the "major capital expenditures" proposed by providers, as well as the use and distribution of health care technologies and procedures. The Health Planning Advisory Committee may be made up of members of the commission and/or other persons that the commission appoints. The Health Planning Advisory Committee must include at least one person representing physicians, one representing hospitals, and one representing the health care technology industry.

In consultation with the Health Planning Advisory Committee, the Health Care Commission is required by HealthRight to make recommendations regarding the following:

1. the types of high-cost technologies, procedures, and capital expenditures that should be included in a plan for statewide use and distribution;
2. the criteria that should be used to evaluate such technologies and expenditures in terms of clinical effectiveness, cost-effectiveness, and health outcomes;
3. the establishment of statewide and regional goals for major capital expenditures and the distribution and use of high-cost health care technologies and procedures;
4. the designation of "centers of excellence" for transplants and other specialized medical procedures; and
5. the minimum volume requirements for the performance of certain procedures by hospitals and other health care facilities or providers.

HealthRight is ambitious in its governing structure and sets high goals for reforming various aspects of the health care industry.

Financing

Determining who should finance Minnesota's effort to provide insurance to the uninsured and reform the health care delivery system was one of the most hotly debated and controversial issues raised by Health-

"The effectiveness
and appropriateness
of HealthRight's
funding mechanism
will be determined
over time."

Right. The debate targeted primarily two funding sources: the health care industry and Minnesota taxpayers. Ultimately, legislators reached a compromise calling for a series of taxes on insurance companies, hospitals, and health care providers. Funding will be also be generated by a 5-cent increase in the cigarette tax, effective until June 30, 1994. Although HealthRight's taxation scheme targets entities in the health care industry, it provides express and implied means for those who pay the tax to pass the costs on to others. Thus, as with virtually any tax of this nature, its impact will likely be spread through the community so that, ultimately, everyone will share the burden and the benefits of HealthRight.

Under the bill, domestic and foreign insurance companies and health maintenance organizations and non-profit health service corporations are required to pay a percentage tax on gross premiums less return premiums on all direct business they receive in Minnesota. Insurers are already paying the tax of 2 percent of gross premiums less return premiums. HealthRight merely reappropriates the general funds generated

by the tax for HealthRight, effective July 1, 1992. A new premiums tax is assessed against HMOs and non-profit health services corporations. The tax is 1 percent of gross premiums less return premiums that are paid *after* December 31, 1995. (HMOs and nonprofit health service corporations are also subject to a gross revenue tax applicable to health care providers.) Premiums paid under the Children's Health Plan, the HealthRight plan, and the Minnesota Comprehensive Health Insurance Plan are not subject to taxation under HealthRight.

Hospitals and health care providers transacting sufficient business in Minnesota are subject to a 2 percent tax on gross revenues less certain exemptions and deductions. "Health care provider" includes any vendor of medical care qualifying for reimbursement under Minnesota's Medical Assistance program, including HMOs. (Hospitals and pharmacies will have their own designations.) The tax is not applicable to revenues generated from or payments received under the Medicare program, excluding enrollee deductibles and coinsurance payments; payments received under the Medical Assistance, General Assistance, and HealthRight programs; payments received for services performed by licensed nursing homes, supervised living facilities, and home health care services; or payments received from hospitals or health care providers for goods and services that are already subject to taxation under HealthRight.

The gross revenues tax on hospitals becomes effective for revenues generated by taxable services and goods that are sold after December 31, 1992. The gross revenues tax on other providers becomes effective for revenues generated by taxable services and goods that are sold after December 31, 1993. Hospitals are required to pay the tax in estimated monthly installments, while all other taxpayers are required to pay the tax in estimated quarterly installments. Both hospitals and health care providers are required to file an annual return reconciling the estimated tax payments with actual tax liability by

March 15 of the following calendar year.

Although HealthRight does not expressly prohibit passing the cost of the gross revenues tax on to others, the bill does prohibit hospitals and health care providers from separately stating the tax on patients' bills. The legislation further provides that, until January 1, 1994, hospitals may transfer the expense of their tax liability generated under HealthRight to all third-party contracts for the purchase of health care services for patients or consumers. The "pass through" expense must not exceed 2 percent of the gross revenues received under the third-party contract and may not be generated on revenues derived from payments that are excluded from the tax imposed under HealthRight. Most third-party purchasers of hospital services are required to pay the transferred expense.

Debate as to whether HealthRight's financing provisions will generate enough funds to support the program has been as intense as the debate over whether it is equitable to require the health care industry to bear the financial burden of the bill. The Minnesota Health Care Commission has been charged with studying the revenue sources and their impact on the health care industry and will submit a report to the 1993 state Legislature. Thus, as with many other aspects of the bill, the effectiveness and appropriateness of HealthRight's funding mechanism will be determined over time.

Cost Containment

As expressed in the bill, one of HealthRight's primary objectives is cost containment:

"The Legislature finds that the staggering growth in health care costs is having a devastating effect on the health and cost of living of Minnesota residents. The Legislature further finds that the number of uninsured and underinsured residents is growing each year and the cost of health care coverage for our insured residents is increasing annually at a rate that far exceeds the state's overall rate of inflation.

"The Legislature further finds that it must enact immediate and

intensive cost-containment measures to limit the growth of health care expenditures, reform insurance practices, and finance a plan that offers access to affordable health care for our permanent residents by capturing dollars now lost to inefficiencies in Minnesota's health care system."

The cost-containment duties of the Health Care Commission and the commissioner of health include:

1. establishing statewide and re-

**"Many providers
fear that the burden
of the tax on their
gross revenues will
outweigh the bill's
benefits."**

gional limits on growth in health care spending, monitoring compliance with spending limits, and taking action necessary to achieve compliance;

2. dividing the state into four regions for purposes of fostering regional health planning and coordinating health care delivery;

3. providing technical assistance to regional coordinating boards;

4. monitoring health care quality throughout the state;

5. developing uniform billing forms and procedures;

6. establishing policies and procedures for major capital expenditures by providers and for the use and distribution of health care technologies;

7. monitoring and promoting the development and implementation of practice parameters;

8. authorizing, funding, or promoting research and experimentation on new technologies and health care procedures;

9. designating centers of excellence for specialized and high-cost procedures and treatments and establishing minimum standards for particular procedures or treatments;

10. promoting statewide consum-

er education and wellness programs;

11. administering a "health care analysis unit" involved in statewide data collection and outcomes research; and

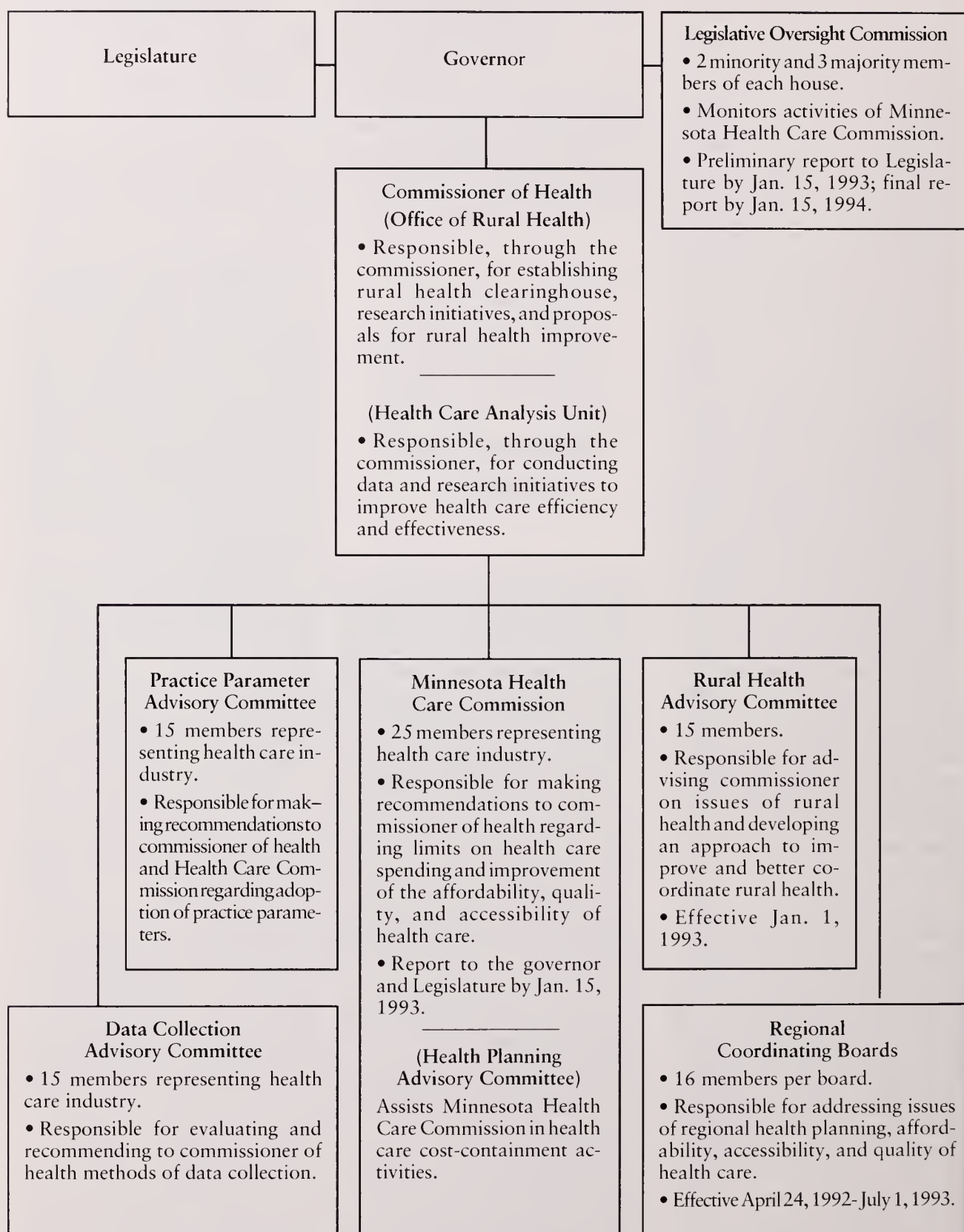
12. taking other action as necessary to effectuate the purposes of the bill.

Two of the duties listed above stand out. First, by January 15, 1993, the Minnesota Health Care Commission is required to submit to the Legislature and the governor its plan to control and reduce growth in health care spending. The plan's goal must be to "reduce the growth rate of health care spending, adjusted for population changes, so that it declines by at least 10 percent per year for each of the next five years." The bill states that the commission shall use the rate of spending growth in 1991 as the base year for developing its plan. The plan may include tentative target dates for reducing growth and spending for later consideration by the Legislature.

Second, any provider making a capital expenditure when establishing a health care service or new specialized service or making a spending commitment in excess of \$500,000 after April 1, 1992, is required to notify the commissioner of health. Unlike earlier versions of the bill, the final version does not give the commissioner any authority to approve or deny the expenditure, but it does give the commissioner authority to review such expenditures retrospectively. If the commissioner determines that the expenditure was inappropriate, the commissioner will require the provider to follow certain "prospective review" procedures with regard to any future expenditures.

Under the procedures for prospective review, the commissioner may prohibit future major spending commitments or capital expenditures for up to five years unless: 1) the provider has filed an application to proceed with the commitment or expenditure with supporting documentation, and 2) the commissioner determines the expenditure is appropriate. The commissioner must make a decision on a completed application within 60 days after an application is submitted. The Health Care

HEALTHRIGHT GOVERNING STRUCTURE



Commission is also required to appoint an expert review panel to review applications and make recommendations to the commissioner and the commission.

The provisions regarding reporting expenditures and major spending commitments do not apply to the following:

1. a major spending commitment to replace existing equipment with comparable equipment, if the old equipment will no longer be used in the state;

2. a major spending commitment made by a research and teaching institution for purposes of conducting medical education, medical research supported or sponsored by a medical school or by a federal foundation or grant, or a clinical trial;

3. a major spending commitment to repair, remodel, or replace existing buildings or fixtures, if, in the commissioner's judgment, the project does not involve a substantial expansion of service capacity or substantial change in the nature of health care services provided; and

4. mergers, acquisitions, and other changes in ownership or control that, in the commissioner's judgment, do not involve a substantial expansion of service capacity or substantial change in the nature of health care services provided.

In another attempt to contain costs, HealthRight requires the commissioner of health to adopt rules restricting financial relationships or payment arrangements under which a health care provider benefits financially by making referrals to other providers or furnishing certain items or services. Until the rules are adopted on July 1, 1992, all providers will be governed by the federal Medicare anti-kickback statutes, which shall govern all providers regardless of whether they participate in any state health care programs.

HealthRight's cost-containment provisions are clearly designed to change Minnesota's health care delivery system. The legislation gives the Health Care Commission and the commissioner of health broad discretion to address issues of growth and health care costs, providers' large capital expenditures and spending

commitments, the establishment of practice parameters, and the development of uniform billing forms and procedures, to name a few. Each of these items involves multiple and complex issues. Thus, although significant change is likely, it is highly improbable that change will occur quickly. The preliminary date to watch is January 15, 1993, the deadline for the Health Care Commission to submit its plan for controlling health care costs to the Legislature and the governor.

Insurance Reform

Another primary objective of HealthRight is to reform insurance practices and enhance accessibility in two vulnerable insurance markets: the small group and the individual markets.

Small group market reform

As a result of rating, underwriting, and administrative practices involved in insuring small groups, many small employer groups are essentially segmented out of the insurance market and are unable to obtain affordable insurance. HealthRight establishes small group market reforms that attempt to make insurance more affordable and accessible for small employers. A "small employer" is defined under HealthRight as one that employs between two and 29 employees during at least 50 percent of its working days.

With limited exception, every health carrier participating in the small employer market must make two lower-benefit, lower-cost plans available to small employers and comply with certain underwriting and rate restrictions by July 1, 1993. The mandated plans are more limited in scope than many traditional benefit packages and have a \$3,000 per individual per year and \$6,000 per family per year out-of-pocket expenditure limit.

Before health carriers are required to offer the two benefit plans set out in HealthRight, at least 75 percent of the small employer's employees must participate in the coverage plan, and the employer must contribute at least 50 percent of the cost of covering the employees. If these conditions are

met, the health carrier must guarantee coverage subject to underwriting and rating limits, and after initial issuance, renew coverage regardless of health status of covered employees or their dependents.

Health carriers are also subject to underwriting and premium-setting restrictions when offering plans to small employers. Health carriers may set premiums and rates based only on such factors as benefit design; duration of coverage; geographical region; industry of the employer; and age, health status, and claims experience of employees. Rating based on gender is prohibited. Rate and premium variations for age, health status, employer industry, and claims experience is restricted. To ensure that health carriers comply with the small employer market requirements, health carriers are required to file a report by April 1 of each year certifying compliance with HealthRight's underwriting and rating requirements.

Individual market reform

HealthRight provides a subsidized health insurance plan to eligible, uninsured individuals. To be eligible for HealthRight insurance subsidies, an individual must be a permanent Minnesota resident for at least six months, have a gross monthly income that is at or below income amounts set forth in the bill, be without employer-supported health insurance for 18 months, and be uninsured for four months. The insurance program will be first available to eligible children and their families for outpatient services on October 1, 1992. Full insurance benefits under the plan will be available to these families on July 1, 1993. The insurance plan will be available to all eligible individuals on July 1, 1994. Once coverage under HealthRight is initially granted, an individual is guaranteed renewal of coverage, subject to limited exceptions. Similar underwriting and rating restrictions applicable to the small employer market will be applicable to health carriers providing coverage to individuals.

The HealthRight insurance benefit package includes the benefits offered under the Minnesota Medical

Assistance program, except for inpatient hospital services in excess of \$10,000, special education services, private-duty nursing services, orthodontic services, medical transportation services, personal care assistant and case management services, hospice care services, nursing home or intermediate care facilities services, inpatient mental health services, outpatient mental health services in excess of \$1,000 per adult and \$2,500 per child per year, and chemical dependency services. Additionally, as of October 1, 1992, up to 10 hours of alcohol and drug dependency outpatient treatment will be included in the benefit plan. Copayments and co-insurance requirements will apply to many services and will be based on ability to pay.

Subject to a 20 percent patient cap, providers must participate in the Medical Assistance, General Assistance Medical Care, and the HealthRight programs as a condition of participating in other state programs, such as the state health insurance plan for employers, workers' compensation, and the Minnesota Comprehensive Health Association. By 1996, providers will also be required to accept assignment for all Medicare patients and will not be able to seek additional funds from patients for Medicare-covered services. In an effort to balance these requirements, certain Medicaid reimbursement rates for physicians, dentists, and hospitals will be increased.

HealthRight also provides a federal tax deduction for all self-insured individuals who pay for their own health insurance. This deduction will be available for taxable years beginning after December 31, 1992.

Miscellaneous

HealthRight establishes a reinsurance pool to transfer some of the risk incurred by health carriers when insuring both small groups and individuals. The bill also establishes a private employers insurance program, whereby employers may join a pool of other employers to obtain health coverage. The program will be administered by the commissioner of employee relations and is intended to provide employers with a larger risk-

sharing pool and increased purchasing power.

Each of the above insurance reforms met with relatively little opposition. They were seen as necessary interventions to correct inequities in the market and provide better access to health insurance. One of the strongest criticisms of HealthRight, however, is that because the small group and market reform provisions are voluntary and will come at some cost to individuals and small employers, the bill may do little to expand insurance coverage of the underinsured and uninsured. Some predictions suggest that, at best, the bill might insure 4 percent of the 7 percent of Minnesotans who are currently uninsured. During the next year, the Health Care Commission will be responsible for providing education about options available under HealthRight and will attempt to determine the bill's impact. Thus, the rewards and ramifications of HealthRight have yet to be seen.

A related criticism of the bill is that it essentially phases out and replaces the Children's Health Plan (CHP), which many believe has been effective in providing health care to low-income children. HealthRight's premiums and fees are higher and more complicated to calculate than the fees required to enroll a child in CHP; thus, some adults who would otherwise have enrolled their children in CHP might not enroll them in HealthRight. To monitor this potential problem, the commissioner of human services will study the impact of HealthRight on premium costs and access to health care for CHP enrollees.

Rural Health

HealthRight also attempts to improve health care access in rural communities by providing financial support and other incentives to enhance and increase rural health care resources. The bill funds two grant programs to assist certain rural hospitals. One grant program will be available for rural hospitals that would otherwise close as a direct result of the 2 percent hospital tax imposed under the bill. HealthRight also establishes loan forgiveness programs for physicians,

nurses, and mid-level practitioners who agree to practice in rural Minnesota; expands the University of Minnesota program designed to provide rural and clinical training for pediatricians and family practitioners; increases funding for regional emergency medical services; and establishes an office of rural health, which will be responsible for serving as an information clearinghouse, coordinating state rural health efforts, assisting local communities in establishing community health centers, maintaining a database on rural health care providers to assist in recruitment and retention efforts, and conducting studies of financial and health aspects of rural communities.

Notwithstanding some of the benefits offered to rural health providers under HealthRight, many providers, especially rural hospitals, fear that the burden of the 2 percent tax on their gross revenues will outweigh the bill's benefits. Proponents of the legislation have countered, however, that any financial burden the tax imposes on rural hospitals will be balanced by the bill's financial benefits, such as decreased uncompensated care rural hospitals provide and increased Medicaid reimbursement. It is likely that this debate will resolve itself over the next two years as rural and urban providers manage, or fail to manage, under the new tax.

Medical Malpractice

Another objective of HealthRight is actually an extension of a previous effort to reform malpractice laws. In 1986, the Minnesota Legislature enacted legislation designed to verify, at the outset of litigation, that malpractice lawsuits are sufficiently supported by expert opinion. Specifically, Minnesota Statute § 145.682 required a plaintiff to submit affidavits by his or her attorney and an expert explicating the grounds for the alleged malpractice.

HealthRight further revises the malpractice laws in three respects. First, it sets forth specific guidelines for conducting written discovery in malpractice actions and requires increased attorney and expert verification of information provided through such discovery. Second, HealthRight

requires the parties to the lawsuits to consider and discuss alternative dispute resolution before proceeding to trial.

Third, HealthRight requires the commissioner of health to convene a 15-member practice parameter advisory committee composed of eight health care professionals and representatives of the research communi-

"HealthRight is ambitious in its governing structure."

ty and the medical technology industry. This committee will work with a health care analysis unit, the Minnesota Health Care Commission, and the commissioner to develop practice parameters relating to diagnosis and treatment of specific conditions. In a malpractice or other action against a provider, the provider's adherence to an established and commissioner-approved practice parameter offers an absolute defense against an allegation that the provider did not comply with accepted standards of practice in the community. This practice parameter defense will be available for claims arising on or after the later of August 1, 1993, or 90 days after the commissioner of health approves the applicable practice parameter.

Practice parameters will be based on determinations of cost-effective, positive-outcome interventions for conditions commonly treated in hospitals and surgical centers on an inpatient or outpatient basis. Data regarding such conditions will be compiled by the health care analysis unit in conjunction with advisory committees, and recommendations for practice parameters related to specific conditions will eventually be made to the commissioner of health. The commissioner may adopt a proposed practice parameter through formal rule making. Formal rule making will not be required for prac-

tice parameters that have been approved by the Agency for Health Care Policy and Research or by national medical societies. Practice parameters adopted without the formal rule-making process must be published in the State Register. Once practice parameters are established, the health care analysis unit will also disseminate information to providers regarding adopted practice parameters.

Reforms relating to provider malpractice defenses, based on adopted practice parameters, will probably be slow to occur. In light of the fact that practice patterns for even commonly treated conditions can deviate substantially among providers, practice parameters will likely be the subject of lengthy research, analysis, and debate. Although this may delay malpractice reform, careful establishment of practice parameters is crucial to long-term improvement of the health care industry. Practice parameters will ultimately yield specific information about practice patterns, treatment outcomes, and cost-benefit analysis, which will not only result in malpractice reforms, but if made available to the public, will also lead to better-educated providers and consumers and enhanced competition and cost containment.

Data Collection

Integral to the achievement of many of HealthRight's objectives is collection of data regarding health care and insurance practices in Minnesota. The commissioner of health and the Minnesota Health Care Commission are charged with establishing a health care analysis unit to conduct data collection and research activities. Data on outcomes of commonly treated conditions will be used to develop outcome-based practice parameters and promote improvements in health care efficiency and effectiveness. The health care analysis unit will collect data from health care providers, health carriers, and individuals and, in conjunction with a data collection advisory committee, will establish a database for a limited number of specific health conditions. The data collected will

include information regarding health outcomes, mortality, morbidity, patient functional status, quality of life, symptoms, and patient satisfaction. The data will be used to establish practice parameters with respect to such conditions. The parameters will be useful for purposes of peer review, technical assistance for purchasers of health care services, outcomes analysis, and medical malpractice lawsuits.

HealthRight authorizes the health care analysis unit to require peer review by the Minnesota Medical Association, Minnesota Chiropractic Association, or an appropriate health licensing board for specific health care conditions. Any peer review conducted must determine whether the procedures performed by practitioners are necessary, appropriate, and within acceptable and prevailing practice parameters that have been disseminated by the unit. Practitioners who inappropriately deviate from the parameters will be educated by the review panel. If education fails to change a practitioner's behavior, the practitioner may be reported to the appropriate professional licensing board.

Conclusion

In matters of public policy, change is generally slow and difficult. With the passage of HealthRight, the Legislature has mandated dramatic change in Minnesota's health care delivery system. To accomplish the law's goals of containing costs and providing affordable health insurance for all Minnesotans, the individuals charged with implementing HealthRight will have to bring new solutions to the table. Clearly, however, any proposed solutions must include input from all areas of the health care industry. Without broad-based support and a thorough analysis of the issues, HealthRight is unlikely to bring about the far-reaching change currently implied in the language of the bill. MM

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The Medicare/Medicaid Anti-Kickback Provisions

Enforcement Implications of The Hanlester Network Decisions

John S. Hibbs, J.D.

The well-publicized decisions in *The Inspector General v. The Hanlester Network* reflect the government's tough-minded attitude toward violations of the Medicare/Medicaid anti-kickback provisions and underscore the importance of structuring new (and restructuring existing) arrangements to comply with the Department of Health and Human Services' "safe harbor" regulations. (The *Hanlester* decision assumes even greater significance for Minnesota physicians as a result of the recently adopted HealthRight legislation, which applies the federal anti-kickback law and safe harbor regulations at the state level.)

Hanlester is the first civil exclusion case that the HHS inspector general has brought under the 1987 statutory amendments, which make it possible to exclude physicians from participating in the Medicare/Medicaid program for violating the Medicare/Medicaid anti-kickback provisions. Because *Hanlester* involved relatively egregious facts, its primary importance lies in the likely strict application of the law to somewhat more ordinary arrangements.

The Medicare/Medicaid anti-kickback provisions make it illegal for anyone knowingly and willfully to solicit, receive, offer, or pay any remuneration in return for (or to induce) 1) the referral of a patient whose health care costs are paid in whole or in part by Medicare/Medicaid, or 2) the purchase, lease, or order of any good, facility, service, or item that is paid in whole or in part by Medicare/Medicaid.

Violation of the anti-kickback provisions is a felony, punishable by a fine of up to \$25,000 or imprisonment up to five years, or both. The inspector general recommends criminal proceedings, but they are actual-

ly brought by the Department of Justice. A 1987 change in the law made a violation of those provisions a basis for excluding violators from participating as providers in the Medicare/Medicaid programs. Exclu-

"The *Hanlester* decisions reflect the government's tough-minded attitude toward violations of the anti-kickback provisions."

sion proceedings are administrative in nature and are commenced by the inspector general.

In July 1991, HHS published its final safe harbor regulations, specifying the conditions that certain arrangements involving the provision of items or services to Medicare/Medicaid patients must meet in order to be immune from criminal or civil enforcement action under the anti-kickback provisions. These regulations were described in an article in the November 1991 *Minnesota Medicine* ("Any Port in a Storm: The Medicare and Medicaid Safe Harbor Regulations," page 25).

Former Cases Define Provisions

Three federal appellate court decisions make it clear that the anti-kickback provisions will be literally interpreted and applied. In *United States v. Greber*,¹ the 3rd U.S. Circuit

Court of Appeals considered Dr. Greber's appeal to overturn his felony conviction under the anti-kickback provisions for paying physicians amounts intended in part to induce physician referrals to his laboratory for program-related services and in part to compensate them for professional services they performed in connection with the lab tests.

Dr. Greber argued that his payments to referring physicians could not violate the anti-kickback provisions unless their *only* purpose was to induce referrals. The Court of Appeals flatly rejected this argument. The court held that "if one purpose of the payment was to induce future referrals, the [M]edicare statute has been violated, even if the payments were also intended to compensate for professional services."

In *United States v. Kats*,² the 9th U.S. Circuit Court of Appeals quoted approvingly from the *Greber* decision and concluded that the lower court accurately stated the law when it instructed the jury that it could convict unless it found the payments for referrals of Medicare business "wholly and not incidentally attributable to the delivery of goods or services."

In the same year, in *United States v. Bay State Ambulance & Hosp. Rental Serv.*,³ the 9th U.S. Circuit Court of Appeals quoted with approval the statutory construction enunciated in *Greber* and rejected the flip side of Dr. Greber's argument: if payments are reasonable in relation to the professional services rendered, nothing is left to represent prohibited remuneration under the anti-kickback provisions, and the payments must have been solely to compensate for professional services, rather than to induce referrals. The court in *Bay State* stressed that

the fundamental element of a violation of the anti-kickback provisions is "inducement." The court said that it did not help that payments might reflect the value of services performed, because "[g]iving a person an opportunity to earn money may well be an inducement to that person to channel potential Medicare payments toward a particular recipient."

Hanlester Network Goes to Court

Then came *Hanlester*. In December 1989, the inspector general proposed excluding the following from Medicare/Medicaid: three laboratories in a limited-partnership arrangement; SmithKline Bio-Science Laboratories, Inc. (SKBL), which managed the three laboratories; the Hanlester Network, a general partnership that served as general partner of the limited partnerships; and five executives of the general partner, including the former marketing director of Hanlester Network and a physician investor identified in a sales brochure as Hanlester Network's medical director. The inspector general did not propose excluding any of the other physician limited partners.

The principal bases for the inspector general's proposed exclusions from the program were his contentions that the parties had violated the anti-kickback statute by 1) restricting the offer of limited partnership interests to physicians in a position to refer patients to the laboratories for items or services covered under the program, 2) offering interests to physicians based on the expected volume of laboratory services they would refer, 3) suggesting probable annual returns on investors' investments of 300 percent to 400 percent if investors' referrals for laboratory services met projections, 4) claiming that it would be a "blueprint for failure" for the limited partnerships' laboratories if physician investors did not make referrals, 5) pressuring physician investors to refer business to the laboratories and threatening a forced repurchase of the physicians' limited partnership interests if they referred less than expected volumes of business, 6) making partnership

profit distributions to investors in return for referrals, and 7) soliciting or receiving payments from SKBL in return for referrals of program-related business.

Before 1989 year-end, the charges against SKBL were settled upon its payment of \$1.5 million to the government. Hanlester Network's former marketing director, who resigned in 1988, did not contest the exclusion proceedings against her, and she was excluded for five years from participating in the Medicare/Medicaid pro-

"Hanlester's primary importance lies in the likely strict application of the law to more ordinary arrangements."

gram. The remaining parties contested the proposed exclusions, and formal proceedings were brought before Administrative Law Judge Steven Kessel.

On March 1, 1991, after lengthy administrative hearings, Judge Kessel handed down his decision in *Hanlester*.⁴ Judge Kessel refused to exclude any of the parties from the Medicare/Medicaid program. His refusal was surprising in light of the case law background, but not as surprising as his reasons for it.

Judge Kessel articulated a novel interpretation of the anti-kickback provisions. He said that those provisions prohibit only "offers of agreements or agreements which foreclose the options of health care providers to order services which are cost-efficient and which are of the best quality." Judge Kessel held that the provisions do not outlaw offers or payments calculated to "encourage" physicians to refer program-related business, drawing a distinction between "encouragement," which the inspector general considered sufficient for a violation, and "induce-

ment." In Judge Kessel's view, a violation of the anti-kickback provisions could occur only if there was an actual or implied agreement tying the remuneration to referrals.

Judge Kessel acknowledged that in the absence of a written agreement, the existence of an illegal agreement may be inferred from the nature and circumstances of the arrangement. He added, relying on *Greber*, that if such an agreement is found to exist, and if a payment is made in any part for an illegal purpose, the statute is violated, even if the payment is also made for a lawful purpose.

On the basis of his conclusion that an agreement tying remuneration to referrals is a necessary element of a violation of the anti-kickback provisions, Judge Kessel also rejected the inspector general's arguments that the limited partnership ownership and profit distribution arrangements violated the anti-kickback provisions.

Nonetheless, Judge Kessel did find that the limited partnerships and Hanlester Network had violated the anti-kickback provisions, through the actions of Hanlester's former marketing director, by knowingly and willfully offering remuneration to physicians to induce them to refer program-related business to the partnerships' laboratories. However, he found "unique circumstances" that militated against an exclusion sanction, which he refused to impose.

The "unique circumstances," in Judge Kessel's view, were that the violation was solely attributable to the actions of Hanlester's former marketing director, who had since resigned; that "no remedial purpose would be served by imposing exclusions against" the limited partnerships or Hanlester Network for the former marketing director's activities; that the partnerships and Hanlester Network had shown no "propensity for hiring untrustworthy agents and employees" nor indifference "to the consequences of their agents' acts"; that the former marketing director's actions were contrary to the intent and policy of the limited partnerships and Hanlester Network; and that there was

no evidence of harm to the Medicare/Medicaid program resulting from the physicians' participation in the limited partnerships.

Inspector General Appeals Hanlester Decision

The inspector general appealed Judge Kessel's decision to the Appellate Division of the HHS Departmental Appeals Board. On September 18, 1991, a three-member appellate panel handed down its decision in *Hanlester*.⁵

The appellate panel squarely rejected Judge Kessel's notion that an agreement tying remuneration to referrals of program-related business was a necessary element in a violation of the anti-kickback provisions. The appellate panel concluded that Judge Kessel "misread what the statute requires and improperly evaluated whether to impose an exclusion."

In response to Judge Kessel's holding that an "agreement" is a necessary element of violation, the panel said: "The plain meaning of the statutory language, as well as its context, purpose, and history, support a conclusion that a violation occurs whenever an individual or entity knowingly and willfully offers or pays anything of value, in any manner or form, with the intent of exercising influence over a physician's reason or judgment in an effort to cause the referral of program-related business. Nothing in the statutory language explicitly or implicitly requires an agreement, nor can the legislative history or case law on the anti-kickback statute reasonably be read to require an agreement."

The appellate panel also made clear that the proper test in deciding the appropriateness of excluding physicians from the Medicare/Medicaid program is not simply deciding whether, as Judge Kessel apparently thought, the inspector general is able to prove harm to the program. "While actual harm to the program is not required as a basis for an exclusion, evidence showing resulting overutilization or reduced quality of services to recipients/beneficiaries is relevant on whether the incentive offered was sufficient to induce referrals."

The appellate panel's decision contained detailed guidelines for analyzing remuneration arrangements in the context of the anti-kickback provisions. Although the guidelines were clearly directed to Judge Kessel and intended to be specific to the circumstances in *Hanlester*, they appear to reflect HHS's more global approach to remuneration arrangements outside the scope of the safe harbor protections.

The appellate panel stressed the following factors to be considered in

"The three decisions make it clear that the anti-kickback provisions will be literally interpreted and applied."

deciding whether a person has offered or paid remuneration for or induced referrals of program-related business.

1. Remuneration offered or paid that exceeds the reasonable value of the services is likely intended to induce referrals.

2. Excessive investment returns imply the existence of remuneration for referrals. In this respect, however, the reasonableness of investment returns should be measured "in terms of the risks involved and the return of alternative investments in general," rather than in terms of what is common for health care limited partnerships.

3. It is permissible to draw inferences from the structure of the venture. For example, the venture may be in violation if interests in the venture are issued only to persons potentially able to make referrals, partners are precluded or discouraged from referring business to competitors, investments were sought to meet the venture's capital needs, the venture met a need for services, and the structure was designed to permit physi-

cian investors to evade restrictions on profiting from tests they order by taking advantage of the reference laboratory exception for more favorable program reimbursement.

4. The connection between referrals and remuneration need not be obvious. The panel noted, "Clearly, a scheme in which payments (or shares which generate payments) are proportional to referrals offers the most direct incentive to physicians to refer or overutilize. Even where payments (or ownership shares) are not divided with regard to actual referral patterns, the greater the impact each physician's referrals will have on his return and the greater the incentive to refer."

5. It is important to consider whether the arrangement is likely to lead physicians to overutilize laboratory services because of the incentives provided. In other words, is the value offered sufficient to interfere with the physician's judgment based on legitimate considerations, such as cost, quality, and necessity of the services?

The appellate panel stressed two generic factors, among others, for determining whether a person has solicited or received remuneration in return for referring program-related business.

1. The compensation received and duties performed must be evaluated to decide whether the physician received any portion of the compensation in return for referring program-related business. (The relevance of this is dubious in view of the *Greber*, *Kats*, and *Bay State* decisions, which make clear that even if the compensation is reasonable in relation to the items or services provided, it may be the mere opportunity to receive the compensation that is itself the prohibited inducement.)

2. Perhaps in part as a helpful reminder to those who are convinced that similar arrangements are legitimate in other contexts, the appellate panel instructed, "The fact that a transaction may have a legitimate business purpose does not mean that the transaction as a whole does not run afoul of the law. See, e.g., *Greber* and *Kats*. While this may be some evidence of intent, it is not determinative."

Hanlester Decision Modified

On March 10, 1992, Judge Kessel issued his Decision on Remand.⁶ He accepted (reluctantly, in some respects) the appellate panel's findings and expressly modified most of his earlier findings in ways essentially consistent with the appellate panel's decision. He found, for example, that even in the absence of an agreement to refer, all of the respondents "knowingly and willfully offered remuneration to physicians to induce them to refer program-related business" in violation of the anti-kickback provisions and that, with the exception of two individuals, all respondents "... knowingly and willfully solicited or received remuneration in return for referring program-related business" in violation of the anti-kickback provisions.

Judge Kessel concluded that "the remedial purposes" of the anti-kickback provisions would be served by permanently excluding the three limited partnerships that owned and operated the laboratories from participating in the Medicare/Medicaid program and by excluding Hanlester Network from the program for two years. Although Judge Kessel did not find a "remedial need" for excluding any of the individual respondents from the program and refused to sustain the inspector general's desire to exclude them, it is probably fair to say that another judge could easily have reached the opposite conclusion.

In spite of his somewhat puzzling interpretation of "remedial need," Judge Kessel appeared to leave little doubt that in future cases, violators of the anti-kickback provisions may be treated less sympathetically: "The Appellate Panel's interpretation of the [anti-kickback provisions] ..., as applied to the fact of these cases, suggests that any provider who invests in enterprises to which he refers business should beware the possibility that he is acting in violation of the law. So should the entrepreneur who organizes such enterprises. Parties who act in disregard of possible violations in the future cannot contend credibly, as have these [individual] respondents, that they acted in an atmosphere of uncertainty."

It is uncertain as this is written whether Judge Kessel's Decision on Remand is the end of the *Hanlester* case or whether the inspector general or some of the respondents will appeal. However, the enforcement implications of the decisions in *Hanlester* seem more predictable, since the applicable law in flagrant cases is the same as it is in only borderline situations.

Conclusion

The appellate panel's endorsement of the inspector general's interpretation of the anti-kickback provisions should encourage the inspector general to proceed more aggressively against even fairly innocuous arrangements that do not fully comply with the "safe harbor" regulations and thus only technically violate the anti-kickback provisions. If so, the inspector general may institute exclusion proceedings in a wide array of borderline cases and also may recommend that the Department of Justice bring criminal charges against the participants in many of the same cases. For this reason, physicians in arrangements that provide items or services to Medicaid/Medicare patients should have experienced legal counsel analyze the arrangements in the context of the anti-kickback provisions. If necessary, nonconforming arrangements should be modified or terminated. MM

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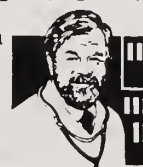
REFERENCES

1. 760 F.2d 68 (3rd Cir.), cert. denied, 474 U.S. 988 (1985).
2. 871 F.2d 105 (9th Cir. 1989).
3. 874 F.2d 20 (1st Cir. 1989).
4. Department of Health and Human Services, Departmental Appeals Board, Civil Remedies Division, Docket Nos. C-186 to C-192, C-208, & C-213.
5. Docket Nos. C-186 to C-192, C-208, and C-213. Decision No. 1275.
6. Docket No. C-448. Decision No. CRI81.



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First, You Have to Get Their Attention

Physician Recruitment Advertising

Carl Hinson and Rick Lingberg

Imagine the following ad in the classified section of one of your favorite journals:

Cola Drinkers

The Acme Cola Company is currently seeking qualified individuals to consume our beverage. When served chilled, this sweet, brown, carbonated liquid will provide many moments of enjoyment for today's thirst-conscious individual. Available in single-, 6-, 12- and 24-unit state-of-the-art aluminum containers. Competitively priced. Excellent thirst-quenching opportunity for those interested. For more information, send your ...

Sounds ridiculous, doesn't it? We all know that for Acme Cola to be successful—to take market share from the industry giants—its advertising must be unique and aggressive. Why then, do so many hospitals and group practices take this same approach in their physician recruitment programs?

Today, as recruiters of physician services, we find ourselves in a more competitive situation than Acme Cola. Our jobs would be easier if our competition came only from two major sources, but we are competing throughout the full medical spectrum—solo practices and community hospitals, large multispecialty group practices and hospital corporations, pharmaceutical companies, and federal, state, and local governments. Some surveys suggest that 87 percent of all hospitals and physician practices in the country are actively recruiting physicians. As a result, physicians all over the United States are bombarded with opportunities for new positions every day.

Consider this:

- Hundreds of medical journals contain 10, 20, and sometimes more than 30 pages of classified ads for practice opportunities;
- Physicians, particularly resi-

*"It isn't always what
you advertise,
but how you
advertise."*

dents, will get as many as 100 direct-mail packages weekly soliciting their services for various positions throughout the country;

- Recruiting firms personally contact thousands of prospective physicians daily.

The result is an extremely competitive environment for recruiting health care providers. Additionally, with medical school applications just rebounding from all-time lows, residency programs not filling, and lifestyle and career pattern changes affecting physician practice preferences, there are many more practice opportunities than physicians to fill the positions.

In the Midwest, these difficulties are compounded by yet another obstacle—misperceptions that much of America's heartland suffers from deprivation of culture, education, information, and recreation. The intense competition for a dwindling pool of candidates and such preconceived opinions of the Midwest, require that we develop physician recruitment programs that use a multi-pronged approach to generating leads and reaching prospects.

Many tools are available to help find candidates for a practice opportunity, including direct marketing, telemarketing, networking, and advertising. Each has the potential for developing leads. Used together in a coordinated strategy, they increase the effectiveness of an overall program. In this article, we examine advertising's potential for developing leads.

Someone once said: "Timing isn't the only thing, it's everything." No statement could be more fitting when discussing advertising as a lead-generating device for physician recruitment. Advertising is pretty amazing, when you consider all the things that must happen for an ad to be conceived, designed, developed, and placed so that some physician, completely unknown to the advertiser, will open a particular journal, search out the practice opportunity advertising section, wade through a plethora of ads, find a particular ad, be genuinely enough intrigued to read it, and then respond in some manner that results in a solid lead.

The good news is people do it and it works—but it needs to be done right.

Know Thy Prospects

To produce effective advertising, you must know your prospects. Too often in recruiting, we focus on the practice opportunity without considering the candidates' needs. In developing physician recruitment programs, it's important to take the time to find out what's important to the candidates. Lifestyle, time with family, and the "chemistry" between the candidate and the group's established physicians appear to be the key factors physicians consider when joining a practice. Your advertising

should address what your practice has to offer in these areas.

Know Thy Self

Before launching advertising programs, organizations or communities should look at themselves as the prospective applicant would. Ask yourself, "What makes this a good practice opportunity? Does it provide a modern environment in which to practice? Is it well supported—financially, by staff, by colleagues? How does this opportunity stack up to the many others available? What would a prospective physician find attractive about living in this community?" Good self-analysis not only helps prepare you for the rigors of recruitment, but it will help you define concepts useful in developing recruitment advertising.

Remember, people live in the Midwest because they *want* to, not because it is the last place on earth, not because they aren't allowed to live in New York, Atlanta, Los Angeles, or Denver. It's a good place to live. They like it! It would be safe to assume that other physicians and their families might feel the same way.

It's important to present the benefits of living in Midwestern communities. Your advertising should reveal the attitudes, work ethic, honesty, and integrity that make the Midwest a great place to live, work, and raise a family. It should describe our pollution-free, low-crime environment, void of the many maladies found in other parts of the country.

With fax machines, electronic transfer of medical information, and excellent transportation, we are not bound by geography. To enjoy the things we want and need, we are limited only by our vision and imagination. Advertising materials can communicate that vision to prospective physicians.

Make Every Opportunity Count—Be Creative

Did you see the finals for the women's 500m short-course speed-skating event at the Winter Olympics in Albertville? Four of the fastest skaters in the world had won their preliminary, quarter-final, and semi-

final races to qualify for this race. All four women had trained years for the event. The results came down to the blink of an eye. Only four one-hundredths of a second separated the gold from the silver, and less than 2.5 tenths of a second separated first from fourth. Cathy Turner, the gold medal finisher, will be in the history books forever and will receive the adulation of her country for years to come. The fourth-place finisher went home with only the satisfaction of participating in the Olympics.

Similarly, a fraction of a second is all the time your ad may get for its initial review, and that fraction of a second may be the difference between victory and going home empty-handed. On average, only a small number of ads in a publication will capture the attention of any one reader. Many ads fail to stop prospects when they scan the page.

Ads perish right from the start because, at one extreme, they just lie there on the page, flat and gray, and at the other extreme, they are cluttered, noisy, and hard to read.

An ad should be constructed so that a single component dominates the area—a picture or graphic, the headline, or the text. The more pertinent the graphic, the more arresting the headline, the more appealing the copy, the better.

For the copy to be persuasive, it should speak to the reader as an individual—as if speaking person to person. The terms should be those of the prospect, not of the advertiser. The message must speak directly to the prospect's needs.

"Anybody can advertise and get the same results," said the skeptic to the ad exec. They agreed to test this by both advertising the same offer in the same paper on the same day. The skeptic's ad read, "Free trip to Disneyland. Driver needed to deliver new car from New York." He got three responses. The advertising executive got 103 answers to her ad, which consisted of the same number of words: "Drive free from New York to Disneyland delivering new air-conditioned Cadillac." It isn't always *what* you advertise, but *how* you advertise.

When prospects open up to a page in a journal, you want your ad

to be the first thing to catch their attention. It may be the last time they see it.

Be Persistent and Patient

With advertising, the challenge of finding the right message and repeating it has never been more important. It's easy to lose sight of the crucial importance of repetition.

Unfortunately, given the variable nature of practice opportunities, there is no rule of thumb for how many times you have to advertise in order to get results. But we know the value of repetition is both cumulative and opportunistic. A joint study by the Advertising Research Foundation and the Association of Business Publishers showed that low levels of advertising did not increase awareness; medium levels increased it by 5 percent; higher levels pushed it up by 19 percent. Repetition is opportunistic in the sense that your ad is more likely to be there with the right message in the right place when the prospect is looking. Far too often advertising is pulled or replaced just as it's beginning to work. Although it can happen, it's not realistic to expect instant results from advertising. Persistence and patience will pay off in the long run.

Is advertising an effective physician recruitment strategy? When asked about a certain restaurant, ex-major leaguer Yogi Berra said, "Nobody goes there anymore, it's too crowded." With more opportunities than physicians, physician recruitment advertising is crowded, but as part of a multi-pronged approach to lead generation, advertising is one method that can cost-effectively put your message in front of a great number of prospects. Advertising carries no guarantees, except one: If you don't, it won't! But do it right and it can.

MM

Carl Hinson is the manager of physician placement for Fairview Hospitals and Healthcare Services based in Minneapolis, Minnesota.

Rick Lingberg is vice president of Phoenix Systems, Inc., a national marketing/communications company based in Sioux Falls, South Dakota.

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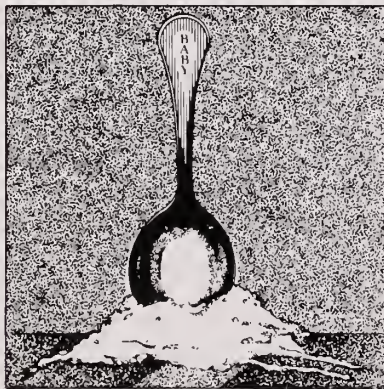


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HealthRight Data Initiatives Call for MMA Involvement

Thomas A. Stolee, M.D.

Despite our grave concerns about the bill, HealthRight has become law. But rather than withdraw in defeat, Minnesota physicians must continue to present a strong front in our struggle to re-shape and improve the legislation. Clearly, many issues will demand our attention, but I would like to focus here on those related to data collection, practice parameter development, and MMA's role in providing educational peer review.

Article 7 of the HealthRight Act states that the commissioner of health, in consultation with the Minnesota Health Care Commission, shall establish a health care analysis unit to conduct data and research initiatives in order to improve efficiency and effectiveness of health care in Minnesota. Among others, the duties of that unit shall be to develop and implement data collection procedures to ensure a high level of cooperation from health care providers and health carriers, to work closely with health carriers and health care providers to promote improvements in health care efficiency and effectiveness, and to develop outcome-based practice parameters. The unit shall collect data from health care providers, health carriers, and individuals in the most cost-effective manner that does not unduly burden providers.

These are laudable goals as long as the data are accurate, the analysis is statistically significant, the interpretation is by physicians and other professionals experienced in practice, and the data on individuals are private.

The act goes on to say that data identifying individuals are private data, and data not on individuals are nonpublic. The commissioner may release private data on individuals and nonpublic data to three entities:



"We have an excellent opportunity to develop a meaningful quality-improvement mechanism."

1. researchers affiliated with university research centers or departments that are conducting research on health outcomes,
2. researchers working under contract with the commissioner, and
3. individuals purchasing health care services for health carriers and groups.

This has significant implications and is subject to legal interpretation and rule making. The Minnesota Medical Association will keep its members informed as more information becomes available.

A 15-member data collection advisory committee, six members of which must be providers, shall be convened by the commissioner of health to evaluate methods of data collection, address data privacy concerns, and assist researchers.

The database established by the health care analysis unit will examine outcomes, clinical efficacy, and cost efficiency for specific health

conditions, rather than procedures, types of providers, or carriers. Outcome comparisons can be made between providers, carriers, public programs, and others. The information collected will be used to develop practice parameters that will be disseminated to all practitioners. Importantly, a 15-member practice parameter advisory committee will be convened to make recommendations regarding practice parameter adoption. This committee will consist of eight health care professionals and seven members representing the medical technology industry and the research community.

Finally, the very important subdivision 3, section 3, of the bill states, "The unit may require peer review by the Minnesota Medical Association ... for specific health care conditions for which practice in all or part of the state deviates from practice parameters. The commissioner may also require peer review by the MMA ... for specific conditions for which there are large variations in treatment method or frequency of treatment in all or part of the state."

It is clear to me that the ball has been put in our court. We have an excellent opportunity to develop, within our own organization, a meaningful quality-improvement mechanism that will be conducted by practicing physicians. The MMA leadership is now forming a peer review committee to respond to the state, to hospital medical staffs, and to others. Minnesota physicians are generally very knowledgeable about data interpretation and peer review. Many of you will be asked to serve. In the interest of maintaining our professional autonomy and integrity, please do so.

MMA

People and Places Making Medical News

People

Minnesota Family Doc of the Year

John Lester, M.D., of Mapleton, Minnesota, has been elected 1992 Family Physician of the Year by the Minnesota Academy of Family Physicians. The award was presented on April 9 at the academy's annual meeting.

Lester has practiced in Mapleton, located south of Mankato, for more than 30 years. In the 1970s, he helped the Mayo Medical School develop its Department of Family Practice, and since that time, he has served as instructor and preceptor to hundreds of medical students. In addition to treating Mapleton residents, Lester has educated area teens about drug and tobacco abuse.

The academy received more than 200 letters of nomination and support for 24 Minnesota family doctors. Finalists for the award were Philip Maus, M.D., Dawson; Richard Mulder, M.D., Ivanhoe; and Richard Schindler, M.D., Austin.

Bolles Bolles-Rogers Award

Alvin L. Schultz, M.D., is the 1992 recipient of the Charles Bolles Bolles-Rogers Award. Each year, the Hennepin County Medical Society gives the award to a physician who has been an outstanding example of the medical profession through contributions in research or leadership. In presenting the award, Eugene Ott, M.D., HCMS chair, noted Schultz's outstanding contributions to medical education and leadership at both local and national levels.

Schultz is senior vice president for Medical Affairs at Health One Corp., a professor of medicine emeritus at the University of

Minnesota in Minneapolis, and a past chair of the HCMS board.

The award was established in 1951 by the late Charles Bolles Bolles-Rogers, who served on the St. Barnabus Hospital Board of Trustees.

HHS Advisory Committee Chair

Former MMA president Richard Tompkins, M.D., has been appointed chair of the Physicians Advisory Committee to Health and Human Services Secretary Louis Sullivan.

AMA Medical Student Trustee

Melissa Garretson, a third-year medical student at the Mayo Clinic, has been elected to represent the MMA medical student section on the AMA Board of Trustees.

National Medical Board President

Melvin E. Sigel, M.D., of Minneapolis, a former member and president of the Minnesota Board of Medical Practice, assumed the presidency of the Federation of State Medical Boards of the United States at the federation's 1992 annual meeting in Boston April 25.

In addition to being on the staff of Abbott Northwestern Hospital, the Children's Health Center, and Riverside Medical Center, Sigel is also a clinical professor at the University of Minnesota and is active in a broad range of state and national medical organizations.

The federation, based in Fort Worth, Texas, is a national voluntary association of U.S. medical licensing and disciplinary boards.

BMP Members

Gov. Arne Carlson appointed new members to the Minnesota Board of Medical Practice. The three new physician members are Richard J. Ivance, M.D., an orthopedic

surgeon from the 4th Congressional District; Stuart V. Thorson, M.D., a family practice physician from the 5th Congressional District; and Paul M. Spilseth, M.D., a family practice physician from the 6th Congressional District. Mary Mika is a new public member from the 6th Congressional District, and Karen Novak was reappointed as a public member from the 2nd Congressional District.

Melvin E. Sigel, M.D., Frank W. Quattlebaum, M.D., Frank J. Tycast, M.D., and Stephen P. Kelley, J.D., concluded their service on the board.

Unity Medical Staff

Audrey Traub, M.D., and Lex Lawson, M.D., have assumed posts as 1992 chief and chief-elect of the medical staff at Health One Unity Hospital in Fridley.

Traub, a surgeon, joined the Fridley Medical Center (Multicare Associates) and the Unity medical staff in 1981. In addition to other hospital committee work, Traub is chair of Women's Health Services of Health One Mercy and Unity hospitals.

As chief-elect, Lawson, an obstetrician/gynecologist, will become chief of staff in 1993. He joined Fridley Ob/Gyn and the Unity medical staff in 1982. In addition to hospital committee duties, he sits on the executive board of the Minneapolis Council of Ob/Gyn and is an associate professor at the University of Minnesota in the Department of Family Practice.

Urological Society President

John D. Holstine, M.D., has been named president of the Minnesota Urological Society for a one-year term. He is a urologist in Fairmont

and succeeds William L. Engel, M.D., of Minneapolis.

Carl S. Smith, M.D., of Minneapolis, was voted member-at-large.

JAMA Editorial Board

Gregory A. Plotnikoff, M.D., a third-year resident in internal medicine at the University of Minnesota, has been appointed to the editorial board of the *Journal of the American Medical Association*, effective June 1992.

Glenn Ebersole Award Winner

Mary O. Cornils, corporate administrative fellow, Fairview Hospital and Healthcare Services of Minneapolis, was named winner of the 1992 W. Glenn Ebersole Award Competition at the Healthcare Forum's 62nd annual meeting April 13 in Anaheim, California. Sponsored by the Healthcare Forum, the national award competition has honored students in health care administration for 28 years. Cornils was awarded \$500 and a plaque.

MDH Legal & Policy Affairs Director

David R. Abrams recently became director of legal and policy affairs at the Minnesota Department of Health. He previously practiced with Dorsey & Whitney in Minneapolis and is a graduate of Yale and the University of Michigan Law School.

BCN Chief Operating Officer

Richard T. Palmisano has been named chief operating officer of BehavioralCare Network. Before joining BCN, Palmisano was administrator and chief executive officer of Charter Hospital and Counseling Services in Sacramento, California. Prior to that, he served in a variety of clinical and management positions in psychiatry and chemical dependency. He was selected in a nationwide search initiated when BCN was created last September.

BCN, a joint venture of Abbott Northwestern Hospital and Health One Corp., is one of the largest providers of adult and adolescent mental health services and chemical dependency programs in the Upper Midwest.

P l a c e s

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Mayo Launches New Programs

Mayo Clinic began a new residential treatment program in May to help severely addicted smokers stop smoking. People in the program will stay for seven days in a smoke-free environment and receive the most intensive therapy available for nicotine addiction.

The program focuses on easing the discomfort of nicotine withdrawal and helping people build new smoke-free lifestyles through individual and group counseling. It also includes planned follow-up for one year to help prevent relapse. The program, part of Mayo's Nicotine Dependence Center, is one of only a few such programs in the country.

Mayo has also embarked on a long-term continuous improvement program intended to intensify how the Mayo system assures top-quality care. A committee at Mayo has been familiarizing Mayo Foundation executives with basic "total quality" concepts for about a half year, and the clinic is starting a new quality process. The committee anticipates the process will take effect over the next five to 10 years, according to the April 7 *Rochester Post-Bulletin*.

Continuous improvement has been a major quality strategy in Japan and is increasingly being used in Minnesota and the United States. According to Rochester Methodist Hospital Administrator Dale Rings, who is on the quality committee, Mayo is already closer to Japanese models than most other businesses because it is patient-driven and team-oriented in organization. Mayo also has a number of internal critique systems and has a low turnover rate in its work force. Nonetheless, the

committee sees opportunities to improve quality; for example, it will consider better ways to use the Mayo Foundation's 18,700-plus work force, perhaps by changing supervisory structures.

Fairview Riverside to Treat Compulsive Gambling

St. Mary's Chemical Dependency Services, a national pioneer in chemical dependency services, has started the Fairview Riverside Compulsive Gambling Program to counsel the growing number of people suffering from the illness. The new program, part of the St. Mary's program, considers compulsive gambling as diagnosable and treatable and as debilitating as alcoholism or drug addiction.

"We were seeing a high incidence of gambling problems among our chemical dependency patients," said Bill Bergwall, director of the gambling program. "In studying compulsive gambling to help those patients, we learned we could use our treatment knowledge to help compulsive gamblers."

Patients meet four evenings a week for up to five weeks. Goals for the patients include understanding the disease of compulsive gambling and the effects of gambling on themselves and others, implementing a debt restitution plan, abstaining from all gambling behavior, developing an aftercare program to support abstinence, and getting involved in Gamblers Anonymous.

S o c i o e c o n o m i c s

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Group Health, MedCenters Plan Partnership

Minnesota's second- and third-largest health maintenance organizations, Group Health, Inc., and MedCenters Health Plan, announced plans in April to form a

partnership. They plan to create a nonprofit holding company, governed by a new joint board of directors, to combine current operating activities. The organizations have signed letters of intent and say they expect to conclude plans by the end of June.

The two HMOs have a combined total of nearly 570,000 members, more than Medica, now the state's largest HMO, with 535,000 members. Care will be provided by Group Health's 350 salaried physicians, 47 dentists, and 875 nonemployee contract specialists and MedCenters' network of 1,000 affiliated general physicians and 1,200 specialists, including 340 doctors at Park Nicollet Medical Center. According to officials at the HMOs, the two plans will retain their names, and members will have a choice between MedCenters, Group Health, or a combination of the two.

The goal of combining the HMOs is to improve medical care and reduce costs, said James Reinertsen, M.D., Park Nicollet's president and chief executive officer.

Health Groups Create Institute

Four of Minnesota's health care organizations announced in April the formation of "The Institute for Clinical Systems Integration," a nonprofit organization with goals to implement continuous quality improvement, measure outcomes of care, and create and implement appropriateness guidelines. The four organizations, Park Nicollet Medical Center, Group Health, Inc., MedCenters Health Plan, and Mayo Clinic, will each commit medical and information systems resources.

Believed to be the first of its kind, the institute will focus on the development of automated clinical systems intended to enhance the quality of care and reduce care-related administrative costs.

"Each of our organizations has

been pursuing these goals independently," said James L. Reinertsen, M.D., president and chief executive officer of Park Nicollet Medical Center. "We're interested in continuing that work together—as a team—to improve both the quality and the efficiency of care."

The institute will be governed by a board composed of representatives from Mayo Clinic, Group Health staff clinics, Park Nicollet clinics, and the affiliated clinics of MedCenters and Group Health. The board also will include business representatives who will help set priorities.

Reinertsen will serve as the first chair of the new institute, and Paul J. Brat, M.D., Group Health medical director and Group Health Foundation president, will serve as the first vice chair.

Workers' Comp Reformed

The 1992 state Legislature passed the first major revision to workers' compensation in nearly 10 years. Proponents say the changes could cut 16 percent, or nearly \$200 million, off the \$1.2 billion employers pay annually in workers' comp premiums.

The new legislation will limit temporary partial compensation to 225 weeks, as opposed to indefinite benefits previously given to help bridge the gap between what workers earn in a new job and what they earned before they were injured. The new legislation won't apply to workers already receiving benefits.

According to John Lennes, state labor and industry commissioner, the cap on these benefits is significant. A state study shows that 97 percent of injured workers are in the compensation system for less than a year, but the 3 percent who continue to receive temporary benefits account for more than 70 percent of the total benefit costs.

Other changes in the new legislation include reduced minimum benefits, reduced cost-of-living adjustments, and a presumption that benefits cease at retirement age.

Coalitions Take Bids on Employee Health Care

Minnesota's two employer health care coalitions, formed as a reaction to spiraling health care costs, have ended bidding on coverage for more than 100,000 of their employees for 1993. They plan to announce their selection in early June.

The Business Health Care Action Group, the coalition for large companies, and Employers Association Health Care Buyer Coalition, for small and medium companies, are demanding that providers prove they are giving the most value for the money and the best possible results.

The coalition of large employers, including such companies as Honeywell, Control Data, General Mills, Pillsbury, and Dayton Hudson, have more than a dozen plans to choose from, and the coalition of small and medium companies has three, possibly four. Both coalitions represent about 50,000 employees each.

The large companies want to continue using self-insurance, meaning minimum financial risk for the chosen bidder. The smaller companies want a mix of insurance and self-insurance. The coalitions say they are trying to break new ground, hoping to enter into partnerships with health care companies that will assure high-quality care, provide practice parameters, monitor treatment outcomes, and provide employees with information that will help them pick cost-effective doctors and hospitals.

HMOs Save Employers Money

Employers saved an average \$527 per worker in 1991 by using HMOs instead of traditional medical plans, according to a study by A. Foster Higgins & Co., an employee benefits consulting firm based in Princeton, New Jersey. Its

survey of more than 2,400 businesses showed that employers spent an average \$3,046 per employee for medical coverage last year, compared with \$3,573 per employee for indemnity plans.

Costs, which varied across the country, were lower in the Twin Cities than in many U.S. cities. The average cost per worker for HMOs in the Twin Cities metro area was \$2,673, while the average indemnity plan cost \$3,003.

Innovations

Surgeons Try New Seizure Cure

Surgeons at St. Paul's United Hospital became the first in Minnesota to perform a new operation developed by researchers in Chicago to stop seizures.

Before the surgery, 33-year-old Patti Helmer of Red Wing had three to 12 seizures a day with sudden vomiting, despite physicians' efforts to stop the seizures with medication. Traditional anti-seizure surgery was ruled out because the seizures were triggered in areas that control the face and neck, said Helmer's physician, John Gates, M.D.

Gates, who had read about the new surgery in a journal article, went to Chicago with neurosurgeon Richard Gregory, M.D., to observe the operation, in which a neurologist first maps the location of the seizure activity and then charts how to interrupt communication among the misfiring cells.

In April, brain surgeon Mary Elizabeth Dunn, M.D., and Gregory cut numerous parallel incisions in Helmer's brain using a special hooked instrument made of steel so flexible it will not cut arteries. Almost a month after the surgery, Helmer had experienced no seizures.

'Plunger' Developed to Aid CPR

Keith Lurie, a clinical electrophysiologist at the University of Minnesota, has helped convert an ordi-

nary plumbers' plunger into a tool for resuscitating heart attack victims. Lurie and former colleagues at the University of California in San Francisco, where Lurie worked until coming to the University of Minnesota last year, developed the device after a San Francisco man's family revived him by using a plunger to perform CPR. The new device, called the Ambu Cardiopump, will soon be tried by St. Paul Fire Department paramedics as part of a national test.

The pump improves standard CPR by allowing the operator to pull up the patient's chest, helping to pump more blood through the heart and pull more oxygen into the lungs.

Augustine Medical Receives Award

Augustine Medical, Inc., manufacturer of the Bair Hugger Patient Warming System, recently received the 1992 award for "Outstanding Achievement in a Health Care Product" from Medical Alley Association, the trade association for Minnesota's health care industry.

The award cited the warming system as an innovative solution for controlling hypothermia, which affects 60 to 80 percent of patients during and after surgery. Since the product was introduced in 1988, it has been used to warm more than 2 million patients. The system, used in operating rooms, intensive care units, and emergency care settings, is now available in 19 countries.

Medical Research

Aspirin Cuts Smokers' Death Risk

University of Minnesota researchers reported that aspirin "dramatically reduces the risk of death" in male smokers who have survived a first heart attack.

The researchers monitored 90 middle-aged male smokers with high serum cholesterol levels for an average of 10 years between 1975 and 1990 after they had a heart attack. Nineteen of 42, (45.2

percent) of those who took no aspirin died within 10 years, 15 of them from heart attacks. Three of 20 (15 percent) who took aspirin occasionally (less than every other day) died, one from a heart attack. Two of 28 (7.1 percent) who took an aspirin at least every other day died, none from a heart attack. The results clearly show significant benefits of aspirin, said Henry Buchwald, M.D., senior author of the study.

The results were reported at an April American Heart Association meeting in Dallas.

Tamoxifen to be Tested

The National Cancer Institute recently announced the start of a national trial to test whether tamoxifen prevents breast cancer in women. The trial will also study the drug's ability to prevent osteoporosis and heart attacks. Most Twin Cities hospitals and the Duluth Clinic will participate in the five-year study, which is expected to include 16,000 women nationwide.

Women at high risk for breast cancer can be screened for participation. For information, call 800/227-2345.

HCMC Conducting Cocaine Study

Physicians from the Hennepin County Medical Center and the Veterans Administration Medical Center in Minneapolis are conducting a study on the effects of long-term cocaine abuse on the brain and whether abstinence from cocaine can reverse the damage. HCMC neurologists David Anderson, M.D., and Frederick Langendorf, M.D., were awarded a \$550,000 four-year grant from the National Institute for Drug Abuse. The study was proposed after HCMC researchers observed that CT scans of cocaine addicts' brains showed atrophy of brain tissue.

Anderson and Langendorf will

administer neurological, brain, and blood tests to participants initially and after six months. They will collaborate with Gail Risse, Ph.D., and Irwin Weisman, M.D., of HCMC. Volumetric analysis will be done at the Veterans Administration Medical Center in Minneapolis by co-investigators David Rottenberg, M.D., and Anil Dhuna, M.D.

AIDS Update

State Passes AIDS Reporting Bill

The state Legislature passed a bill in April that requires health care professionals who contract the AIDS virus or hepatitis B to report their condition to the Minnesota Department of Health, which will monitor professional conduct. The bill is intended to protect the public and improve confidence in the health care professions, said Rep. David Bishop, IR-Rochester, the bill's chief sponsor.

Health care workers who fail to report are subject to disciplinary action, including loss of professional license. When a health care worker reports, the Health Department will set up a monitoring program. Workers could be suspended for failing to follow infection-control procedures.

Institutions such as hospitals and clinics are also required to report when employees contract HIV.

DDI More Effective than AZT

The drug DDI appears to be more effective than AZT in slowing AIDS, according to a study presented at a recent meeting of AIDS researchers. The study included 913 HIV-positive patients, 30 percent with fully developed AIDS, 60 percent with AIDS-related complex, and 10 percent with no symptoms of the disease. DDI was effective in the ARC patients and the HIV-infected asymptomatic group, but not in the patients with AIDS.

All the participants had previously taken AZT for at least 16 weeks, and many had been on the

drug for several years. The researchers noted that it is unknown whether DDI is more effective than AZT in patients who have never

taken AZT. The length of time the patients had been on AZT did not seem to influence the outcome, they reported.

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A Calendar of Continuing Medical Education Courses

Provided through the MMA Medical Education Subcommittee on CME Resources. For assistance with scheduling meetings or for information on future medical meetings and CME courses, please contact the MMA office: 2221 University Avenue SE, Suite 400, Minneapolis, Minnesota 55414; 612/378-1875. Information for each entry is arranged by date; name of program; primary sponsor; location; contact person.

JUNE 1992

June 5-6 **Clinical Hypnosis Workshops: Advanced and Introductory** Office of CME, University of Minnesota Medical School; Sheraton Midway Hotel, St. Paul, MN. CONTACT: Becky Noren, Office of CME, Radisson Hotel Metrodome, Suite 107, 615 Washington Avenue SE, Minneapolis, MN 55414; 612/626-7600.

June 8-12 **Team Management of Diabetes Mellitus** International Diabetes Center; International Diabetes Center, Minneapolis, MN. CONTACT: Cindy Poppitz, International Diabetes Center, 5000 West 39th Street, Minneapolis, MN 55416; 612/927-3393.

June 10-12 **Topics and Advances in Pediatrics** Office of CME, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of CME, Radisson Hotel Metrodome, Suite 107, 615 Washington Avenue SE, Minneapolis, MN 55414; 612/626-7600.

June 11-25 **Scandinavia/Russia Air/Sea Cruise** INTRAV; Denmark, Russia, Finland, Sweden, Poland, Norway, Holland. CONTACT: North Central Medical Conference, 1845 Hampshire Avenue, #200, St. Paul, MN 55116; 612/698-1888.

June 12-13 **Advanced Laparoscopic Abdominal Surgery Seminar** Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, Minneapolis, MN 55407; 612/863-5461.

June 13 **HCMC Class of '61 Medical Review** Hennepin County Medical Center; Hennepin County Medical Center, Minneapolis, MN. CONTACT: Celia, 701 Park Avenue, MC 867A, Minneapolis, MN 55415-1829; 612/347-2079.

June 15-19 **Team Management of Diabetes Mellitus** International Diabetes Center; International Diabetes Center, Minneapolis, MN. CONTACT: Cindy Poppitz, International Diabetes Center, 5000 West 39th Street, Minneapolis, MN 55416; 612/927-3393.

June 17-19 **56th Annual Course Progress in Vascular Surgery** Department of Surgery, University of Minnesota Medical School; Willey Hall, University of Minnesota, Minneapolis, MN. CONTACT: Office of CME, Radisson Hotel Metrodome, Suite 107, 615 Washington Avenue SE, Minneapolis, MN 55414; 612/626-7600.

neapolis, MN 55414; 612/626-7600.

June 18 **Immunizations: New Directions and Controversies** Group Health, Inc.; Minneapolis Metrodome Hilton, Minneapolis, MN. CONTACT: Debbie Bladine, Group Health, Inc., 2829 University Avenue SE, Minneapolis, MN 55414; 612/623-8479.

June 19 **Crisis Intervention Program** Hennepin County Medical Center; Hennepin County Medical Center, Minneapolis, MN. CONTACT: Program Coordinator, 701 Park Avenue, MC 867A, Minneapolis, MN 55415-1829; 612/347-2075.

June 20-July 2 **Midnight Sun Express & Alaska Passage** INTRAV; Fairbanks/Anchorage, Alaska. CONTACT: North Central Medical Conference, 1845 Hampshire Avenue, #200, St. Paul, MN 55116; 612/698-1888.

June 26-27 **Sexual Attitude Reassessment Seminars (SAR)** Program in Human Sexuality, Holiday Inn Metrodome, Minneapolis, MN. CONTACT: SAR Coordinator or Secretary, Program in Human Sexuality, FMC Building, 1300 South Second Street, Minneapolis, MN 55454; 612/625-1500.

June 26-27 **Minnesota Obstetrical and Gynecological Society Scientific Program** Minnesota Ob/Gyn Society; Lutsen Resort, Lutsen, MN. CONTACT: Susan Thompson, Department of Ob/Gyn, 5000 West 39th Street, Minneapolis, MN 55416; 612/924-1802.

JULY 1992

July 16-19 **Advances in Clinical Management of Infectious Disease** Hennepin County Medical Center; Hennepin County Medical Center, Minneapolis, MN. CONTACT: Robin Hoppenrath, 701 Park Avenue, MC 867A, Minneapolis, MN 55415-1829; 612/347-2075.

July 20-24 **Team Management of Diabetes Mellitus** International Diabetes Center; International Diabetes Center, Minneapolis, MN. CONTACT: Cindy Poppitz, International Diabetes Center, 5000 West 39th Street, Minneapolis, MN 55416; 612/927-3393.

AUGUST 1992

Aug. 3-7 **Team Management of Diabetes Mellitus** International Diabetes Center; International Diabetes Center, Minneapolis, MN. CONTACT: Cindy Poppitz, International Diabetes Center, 5000 West 39th Street, Minneapolis, MN 55416; 612/927-3393.

Aug. 20-22 **Operative Gynecology: Third Annual Live Televideo Conference** Mayo Clinic/Mayo Foundation; Mayo Foundation; Rochester, MN. CONTACT: Postgraduate Courses, Mayo Clinic/Mayo Foundation, 200 1st Street SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

SEPTEMBER 1992

Health One Medical Education

June 11

The Impact of STD on Infertility

Presented by Doris Brooker, MD
12:30 p.m., Sioux Valley Hospital
New Ulm, MN

July 9

Smoking Cessation

Presented by Leif Solberg, MD
12:30 p.m., Sioux Valley Hospital
New Ulm, MN

September 10 & 11

Practical Pediatrics for the Primary Care Physician

United/Children's Conference Ctr., St. Paul

October 2 & 3

Epilepsy Progress Conference: Update on Medical and Surgical Treatment

United/Children's Conference Ctr., St. Paul

October 9

Current Clinical Cardiology for Physicians and 11th Annual Jesse E. Edwards, MD Lecture

United/Children's Conference Ctr., St. Paul

For further information contact the
Office of Medical Education & Research,
Health One (612) 574-7895
or call toll-free 1-800-343-3627

Health One
Medical Affairs Division

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Sept. 5 **Pediatric Emergency Medicine Conference—Topics in Pediatric Emergency Medicine** Minneapolis Children's Medical Center; Education Building, Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Kathy Ingerson, MCMC, 2525 Chicago Avenue South, Minneapolis, MN 55404; 612/863-5884.

Sept. 6-7 **Pediatric Emergency Medicine Conference—Pediatric Advanced Life Support (PALS)** Minneapolis Children's Medical Center; Education Building, Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Kathy Ingerson, MCMC, 2525 Chicago Avenue South, Minneapolis, MN 55404; 612/863-5884.

Sept. 10-11 **Second Annual Children's Hospital of St. Paul Practical Pediatrics Course for the Primary Care Physician** Children's Hospital of St. Paul; United/Children's Conference Center, St. Paul, MN. CONTACT: Sue Hance, Health One Medical Education, 2810 57th Avenue North, Minneapolis, MN 55430; 612/574-7895 or 800/343-DOCS.

Sept. 11 **Adolescent Medicine for the Primary Care Practitioner** Minneapolis Children's Medical Center; Park Inn Minneapolis, Minneapolis, MN. CONTACT: Kathy Ingerson, Minneapolis Children's Medical Center, 2525 Chicago Avenue South, Minneapolis, MN 55404; 612/863-5884.

OB/GYN PHYSICIAN

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Sept. 11-12 **Lasers in Orthopedic Surgery** Laser Center of Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Laser Center 39102, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-3000.

Sept. 18 **Thrombolytic Therapy in Acute MI** Abbott Northwestern Hospital; Minneapolis Heart Institute, Minneapolis, MN. CONTACT: Minneapolis Heart Institute Foundation, 920 East 28th Street, Minneapolis, MN 55407; 612/863-3979.

Sept. 18-19 **Advanced Laparoscopic Abdominal Surgery Seminar** Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

Sept. 26 **Minnesota Radiological Society Fall Meeting** Minnesota Radiological Society; Radisson Hotel, Rochester, MN. CONTACT: Allen V. Bergh, M.D., 69 West Exchange Street, St. Paul, MN 55102; 612/291-3183.

Sept. 29-Oct. 9 **Canada/New England Air/Sea Cruise** North Central Medical Conference; Canada and New England. CONTACT: North Central Medical Conference, 1845 Hampshire Avenue, Suite 200, St. Paul, MN 55116; 612/698-1888.

RHEUMATOLOGIST

Opportunity available in a progressive and growing 31-physician clinic of specialists and sub-specialists of internal medicine. New, modern clinic located adjacent to an accredited acute-care hospital. Growing central Minnesota community offers:

- Three colleges -
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- Abundant recreational activities -

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Mark J. Murphy, Administrator
The St. Cloud Clinic of Internal Medicine, Ltd.
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612/252-5131

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- Occupational Health
- Family Practice with interest in Occupational Health
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Excellent salary and benefit package leading to shareholder status.

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Minneapolis, MN 55432
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General Orthopaedic practice with emphasis on adult reconstructive surgery, sports medicine, and trauma, seeks *Medical Orthopaedist* for office-only work. No call. Competitive salary and benefit package.

Resort community with abundance of winter and summer recreational outlets.

Send CV to: Terence J. Kennedy, M.D.,
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Physician Opportunities and Miscellaneous Listings

Classified rates are \$1.00 a word. Minimum monthly charge is \$35; with box number \$5 additional. Ads will not be accepted by phone.

- Placement of ads must be made six weeks before the date of publication (e.g., June 15 for August ad). Please send ad requests to *Minnesota Medicine*, 2221 University Avenue SE, Suite 400, Minneapolis, Minnesota 55414.
- The publisher reserves the right to decline or withdraw advertisements. The publisher is not responsible for clerical or typographical errors and is not permitted to divulge the identity of advertisers who have replies sent to box numbers.
- Cancellation of ads must be made by the first of the month preceding month of issue.

Healthcare Resource Group works with clients seeking additional physician associates for practices both locally and nationally. Physicians who work with us know that confidentiality is respected and their CVs are not advanced without personal approval. This personal and professional approach has provided valuable assistance to both clients and candidates seeking relocation or an alternative professional affiliation. For further information, please send your CV or call Liz Johnson, Healthcare Resource Group, 9072 Preserve Blvd., Eden Prairie, MN 55347; 612/828-6890.

(6/92-R)

Internist to join a progressive 13-physician group practice. Rural college town 30 miles from St. Paul, Minnesota. New clinic and constructing new hospital. Contact: Robert B. Johnson, M.D., River Falls, WI 54022; 715/425-6701.

(*9/91-R)

Mankato: FP partner to join four board-certified family physicians, ages 34-43, in fast-growing, full-range practice. Ob optional. Population 40,000+. Seventy miles to Twin Cities. Four colleges nearby. Subspecialty consultation readily available on hospital staff. Academic appointment available. Call: Tony Giefer, M.D., 507/387-8231. (8/91-R)

Family Physicians: Well-established south suburban Minneapolis family practice group seeks associates part/full time to staff day clinic. Excellent call schedule, salary, and fringe benefits. Also seeking locum tenens to staff PT/FT Urgent Care Centers and/or day clinic. Contact: Administration, Family Physicians, P.A., 612/435-4125, or send inquiries to Suite 100, 14050 Nicollet Avenue South, Burnsville, MN 55337.

(*9/89-R)

Mankato Clinic, Ltd. is seeking BC/BE physicians in the following specialties: invasive cardiology, oncology/hematology, pulmonary medicine, general surgery, gastroenterology, family practice, and general internal medicine. The Mankato Clinic is a 53-physician multispecialty group

practice in south-central Minnesota with a trade-area population of +250,000. Guaranteed salary first year, incentive thereafter with full range of benefits and liberal time off. For more information call: Dr. B. C. McGregor, President, or Roger Greenwald, Executive Vice President, 507/625-1811 or write: 501 Holly Lane, Mankato, MN 56001.

(12/91-R)

BC/BE Orthopedic Surgeon and BC/BE Family Practice, Internal Medicine, and Ob/Gyn Physician: Excellent opportunity to join well-established, progressive, 20-physician multispecialty group located in an economically sound community of 20,000 (drawing area of 40,000), 65 miles south of the Twin Cities. Full membership after one year. Competitive salary and fringe benefits package. Contact: Ed Durst, M.D., or Terry Tone, Administrator, 134 Southview, Owatonna, MN 55060; 507/451-1120. (2/92-R)

Forest Lake Doctor's Clinic is seeking a BC/BE family physician, pediatrician, ob/gyn, and internist to join 10-physician multispecialty group. Located 25 miles north of Minneapolis-St. Paul in progressive community with excellent schools, many beautiful lakes, recreational activities, golf, fishing, boating, skiing. Local hospital directly across street. Contact: Dr. Harvey J. Frank or Dr. Doug Sill, 121 SE 11th Avenue, Forest Lake, MN 55025; 612/464-7100.

(4/90-R)

MDsearch assists medical groups and hospitals in their recruiting efforts. For confidential information on opportunities in the Upper Midwest, send CV and/or call collect: Mary Jo Cordes, MDsearch, PO Box 21507, St. Paul, MN 55121; 612/454-7291.

(12/91-R)

Lake City, Minnesota: Family physician BC/BE needed to join three other FPs in progressive, growing practice on Lake Pepin/Mississippi River in southeastern Minnesota. Excellent first-year salary/benefits in a scenic community with multiple recreational opportunities. Contact: D.D. Pflaum, M.D., 303 South Washington, Lake City, MN; 612/345-3318.

(8/90-R)

Olmsted Medical Group is seeking BC/BE physicians in the following specialties: orthopedics, radiology, family practice, emergency medicine, and ob/gyn. Great opportunity for well-trained physicians to join a 55+ physician multispecialty group in a dynamic, progressive practice. In addition to the main office in Rochester, the group operates eight branch offices in southeastern Minnesota. Excellent salary/benefits package includes malpractice insurance, flexible benefits plan, 401(k) and profit sharing, and relocation assistance. Send CV to: Olmsted Medical Group, Attn: Susan Schuett, 210 Ninth Street SE, Rochester, MN 55904.

(1/92-R)

Downtown Office Space for Rent: Physician in the Medical Arts Building, 825, wishes to sublet to another physician on a part-time basis for the purpose of sharing overhead expenses. Call: 612/370-0553. (6/90-R)

Wisconsin: 120-physician multispecialty clinic in the Fox River Valley of northeastern Wisconsin desires two BC/BE pediatricians to join department of 15 BC/BE pediatricians. Excellent compensation and benefits package, leading to shareholder status after two years. The community offers a superb recreational, cultural, and family environment in which to practice. For information please call or write: Howard Kidd, M.D., La Salle Clinic, 411 Lincoln Street, Neenah, WI 54956; 414/727-4276. (3/91-R)

Family Physician wanted to join three board-certified M.D.s in well-established, expanding group practice. Weekend ER coverage. No buy-in. Financial package hard to beat. Enjoy a progressive, rural city within easy reach of St. Cloud and Minneapolis. Contact: Dr. Jim Mohs, Melrose Clinic, 603 West Main Street, Melrose, MN 56352; office, 612/256-4228; home, 612/256-3488. (4/91-R)

Internal Medicine, Pediatrics, and Dermatology practice opportunities available at the Faribault Clinic. The Faribault Clinic is a multispecialty group practice of 19 physicians. Faribault is located 50 miles south of Minneapolis on I-35. For more information contact: Ray W. Wood, M.D., or Ken Smith, Administrator, 924 NE First Street, Faribault, MN 55021; 507/334-3921. (4/90-R)

Stillwater: Multispecialty group with emphasis on primary care seeking BC/BE family physician, pediatrician, and internist. Scenic location with excellent school system, supportive medical community with strong local hospital, competitive salary and benefits. Send CV to: Jon Petersen, St. Croix Valley Clinic, 921 Greeley, Stillwater, MN 55082; 612/439-2215. (12/92-R)

Family Practice—Minnesota: Enjoy the benefits of country living yet have the resources of a major metropolitan area close at hand. Health One Buffalo Hospital is seeking a family physician to join two FPs and a nurse practitioner in its clinics in Annandale and Winsted. Share call with five physicians. Competitive compensation with excellent benefits including year-round outdoor recreation in "the heart of the lakes." Contact: Kim Isenberg, Health One Buffalo Hospital, 303 Catlin Street, PO Box 609, Buffalo, MN 55313; 612/682-1212, Ext. 245. 6-6/92

North-Central Minnesota: Primary care BC/BE general practice internist and BC/BE family practice physician with ob interest to join well-established group of six family practitioners and general surgeon. Excellent compensation benefits surround family-oriented community lifestyle. Send inquiries or CV to Julayne Mayer, Director of Physician Recruitment, Tri-County Hospital, 415 North Jefferson, Wadena, MN 56482; 800/950-0314; fax: 218/631-9292. (6/92-R)

Physician Wanted

Physician to specialize in the non-surgical care of cervical, thoracic, and lumbar disorders. The Midwest Spine Institute is a patient-centered, surgical-based organization specializing in the evaluation and treatment of spinal disorders. MSI is searching for a physician who will be responsible for assessing the needs of patients with neck and back pain, establishing specific treatment programs for these patients, including coordinating rehabilitation and chronic pain management programs. If interested, please contact Dr. Thomas Rieser at:

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FAMILY PRACTICE

Lake Region Clinic in Brainerd, Minnesota is currently recruiting 2 Family Practice physicians to join 4 family practice physicians. Able to do the full scope of family practice including ICU (OB optional). Good cooperative working relationship with specialists in orthopedic surgery, urology, ENT, OBG, general surgery, internal medicine, ophthalmology, and psychiatry.

Modern well-equipped 160 bed hospital within two blocks.

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Send CV or contact:
Darral Mischke, Administrator,
or David Boran, M.D., at
218-829-3568

Physician Practice Opportunities

Immediate Openings

If **HEALTHRIGHT** is causing you discomfort, consider these Midwest practices, and make your move before school starts this fall!

ONCOLOGY: Proven W2 income of \$497,000. City of 65,000, 1/2 hr from metro. Superb lab, CT & MRI, radiation therapy.

INTERNAL MEDICINE: 8-way call, state-of-the-art clinic. City of 60,000, aerospace museum, excellent schools, near metro.

PEDIATRICS: 2 Practices: Academics & private practice, city of 300,000, or group, city of 30,000. Potential: \$115,000-\$130,000.

OB/GYN: Closeknit city of 30,000, colleges, ranch or city living. 700 births, low HMO & Medicaid. Net income potential: \$200,000+.

ORTHOPEDIC SURGERY: 3 Practices: Waterfront City, Ranching Area, or Metropolitan Area. Potentials exceeding \$400,000 net per year.

UROLOGY: 2 Practices: Iowa waterfront community, solo or associateship; or Dallas suburb. Potential \$200,000 +.

OTHER SPECIALTIES: Call for info, all regions of the United States.

All replies kept confidential.

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Pediatrician wanted to join group of five board-certified pediatricians in a well-established, progressive group practice. Located in Minneapolis, minutes away from Children's Medical Center. Small practice stressing patient care and preventive medicine. Contact: Gregg Savitt, M.D., 3145 Hennepin Avenue, Minneapolis, MN 55408.

(9/91-R)

Wisconsin—Fourth BC/BE Obstetrician/Gynecologist needed to join stable, progressive, primary-care-based HMO/group practice in university town of 60,000 near Minneapolis/St. Paul. Excellent quality of life and outstanding recreational area. Competitive salary and fringe benefits. Contact: Stuart R. Lancer, M.D., M.B.A., Medical Director, Group Health Cooperative, PO Box 3217, Eau Claire, WI 54702-3217; 715/836-8552.

*4-6/92

Wisconsin—Family Practitioner Needed by progressive and growing group practice in west-central Wisconsin city of 60,000. Ninety miles from Minneapolis/St. Paul. Primarily prepaid practice with large component FFS. Highly competitive salary with excellent fringe benefits. Practice high-quality care in a good recreational area. Send CV to: Stuart R. Lancer, M.D., M.B.A., PO Box 3217, Eau Claire, WI 54702-3217; 715/836-8552.

*4-6/92

Family Physician wanted to join five-physician, two-P.A., two-site family practice group in St. Anthony and Shoreview. Ob available. Competitive salary, benefits package, and call schedule. Contact: Gerald Pitzl, M.D., Silver Lake Clinic PA, 612/788-9251.

(7/91-R)

Ideal Internal Medicine Practice: Excellent opportunity for BC/BE internist to establish a prosperous practice. Progressive 107-bed community hospital with a medical staff of 45 physicians and a service-area population of over 45,000. Vibrant Northern Michigan community with all summer and winter recreational activities. Salary guarantee of \$110,000 with excellent benefits. Send CV or contact: John Schon, Administrator, Dickinson County Hospitals, 400 Woodward Avenue, Iron Mountain, MI 49801; 800/323-8856.

*1-6/92

Family Practice: Physicians seeking a BC/BE family practice physician for the Norway, Michigan, service area. The physician would have the option of joining one of the existing practices and/or setting up his/her own practice. Anderson Memorial Hospital is a part of Dickinson County Hospitals and has a service-area population of over 45,000. Contact: Dr. Paul Hayes' office, 906/563-9255, or Dr. William Gladstone's home, 906/563-8743. Anderson Memorial Hospital, Main Street, Norway, MI 49870; 906/563-9243.

*1-6/92

Alexandria, Minnesota: Three-person internal medicine group desires to add a fourth partner. Send CV to J. E. McCrery, M.D., 1527 Broadway, Alexandria, MN 56308.

6-9/92

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Falls Medical Search Seeks Physicians for practice opportunities locally and nationally. To explore new practice options confidentially, send your CV or call: Pat Falls, Falls Medical Search, 34 Forest Dale Road, Minneapolis, MN 55410; 612/922-0207 or 800/383-8916. (*5/92-R)

Orthopedic Surgeon and Pediatrician: A growing university community in southern Minnesota has practice opportunities for an orthopedic surgeon and pediatrician. Excellent call schedule and outstanding financial compensation package. Attractive lifestyle for someone who enjoys hunting, fishing, a friendly community, and not spending time in traffic. Contact Verne Meyer, Staffing Consultant, Delacore, 101 Park Place, Hutchinson, MN 55350; or call 800/833-8487. 3-6/92

Door County, Wisconsin: BC/BE internist. Modern, 89-bed community hospital with new outpatient services addition. Competitive guaranteed salary, incentive package, malpractice insurance, attractive benefits. Exceptional four-season recreation along Lake Michigan shores. Proximity to Milwaukee/Chicago. Top-rated schools. Quality community life. Send CV to: Priscilla Khoury, Physician Re-

cruitment Coordinator, 330 South 16th Place, Sturgeon Bay, WI 54235. *3-6/92

Come in From the Cold—Family Practice, Crane, Texas: Here are four good reasons to move from Minnesota to Texas: January, February, March, and Texas has no state income tax. Enjoy city amenities without having to live there. Crane Memorial Hospital is looking for two family practitioners. Beautiful modern 28-bed hospital and office building. Small town, medically underserved area. Health care professional shortage area. Only 45 minutes from international airport. Only 30 minutes from interstate highway. Excellent schools. Warm, dry climate. Great recruitment package. Contact: Steve Goode, Administrator, Crane Memorial Hospital, 1310 South Alford Street, Crane, TX 79731. Phone 915/558-3555. *3-7/92

Internal Medicine, Family Practice, Urgent Care, OB/Gyn, and Academics: Positions in large metropolitan cities, urban and rural communities with a concentration in the Great Lakes area and Plains states. Whether you prefer a cosmopolitan lifestyle, a city surrounded by nature and the beauty of the four seasons, the peaceful rolling farm country, or perhaps life in historic villages—there is something for you. To discuss your practice preferences and these opportunities, please call our toll-free number, 800/243-4353, or send your CV to Strelcheck & Associates, Inc., 10624 North Port Washington Road, Mequon, WI 53092. *3-7/92



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- Otolaryngology • Neurology • Pediatrics
- Ophthalmology • Cardiovascular surgery

Dakota Clinic prides itself in state-of-the-art facilities and communities with exceptional amenities. We offer competitive salaries and benefits along with a strong administrative and support staff. To receive our video and community/practice information, contact:

Dick Reis, Recruiting Manager
Dakota Clinic, Ltd.
1702 South University Drive
Fargo, North Dakota 58103
800/342-4926



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The Alexandria Clinic, P.A., is a 16 physician multi-specialty Group currently recruiting physicians in the following specialties:

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If interested in joining a young, growing organization located in beautiful lakes area community, please contact:

Timothy A. Hunt, Administrator
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Cardiologist, BC/BE, desired for consultative practice in delightful Minnesota community of 90,000 with referral base of 250,000. Personable, energetic person desired as sixth cardiologist in a 31-person Internal Medicine/Internal Medicine Subspecialty clinic. The St. Cloud community has:

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John Mahowald, M.D., or
Mark J. Murphy, Administrator
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*3-7/92

Urgent Care: FT or PT opportunities available in busy, well-established, Cedar Rapids urgent-care center. Occupational medicine including pre-employment evaluations and work-related injury treatment are also part of the practice. X-ray, laboratory, and physical therapy services available within clinic. Cedar Rapids, population 110,000, is located in eastern Iowa and is 30 minutes from the University of Iowa. Excellent compensation and scheduled hours. Mail CV or call Bob Waste, Mercy Care Management, PO Box 786, Cedar Rapids, Iowa 52406; 319/398-6460. 3-7/92

General Surgeon: Five-man family practice group seeks surgeon. Only clinic in city of 8,000, one hour from Minneapolis. Position should generate adequate salary and lots of family time. Please contact James W. Dey, M.D., or Ruth Hawker, Clinic Manager, 501 North State Street, Waseca, MN 56093; 507/835-3110. (5/92-R)

One or Two Family Practice Physicians to join five family practitioners. Population 8,000. One hour south of Burnsville Center. Lakes, industry, negotiable salary. Clinic adjacent to hospital. Ample free time to enjoy family life. Contact James W. Dey, M.D., or Ruth Hawker, Clinic Manager, 501 North State Street, Waseca, MN 56093; 507/835-3110. (5/92-R)

Redwood Falls, Minnesota—Family Physicians: Four family physicians, one general surgeon, looking to add one or two BC/BE family physicians. Superb benefits and retirement package, very liberal vacation time. Limited ER call. Contact: Jim Schulte, Redwood Falls Hospital, 100 Fallwood Road, Redwood Falls, MN 56283; 507/637-2907.

3-7/92

Well-Established Family Practice available in rural northern Minnesota. As busy as you choose to be. Dispensary, small lab, and X-ray in office. New 80-bed regional hospital, well equipped, additional expansion in planning stage. Specialty consultants available. Near Boundary Waters canoe area, skiing, fishing, hunting, and clean air. New K-12 school with achievement scores above state and national average. State university, two community colleges, and vo-tech nearby. Write Gordon W. Franklin, M.D., Box 1 South Route, Northome, MN 56661; or call: 218/897-5222 or 218/897-5272 evenings. (5/92-R)

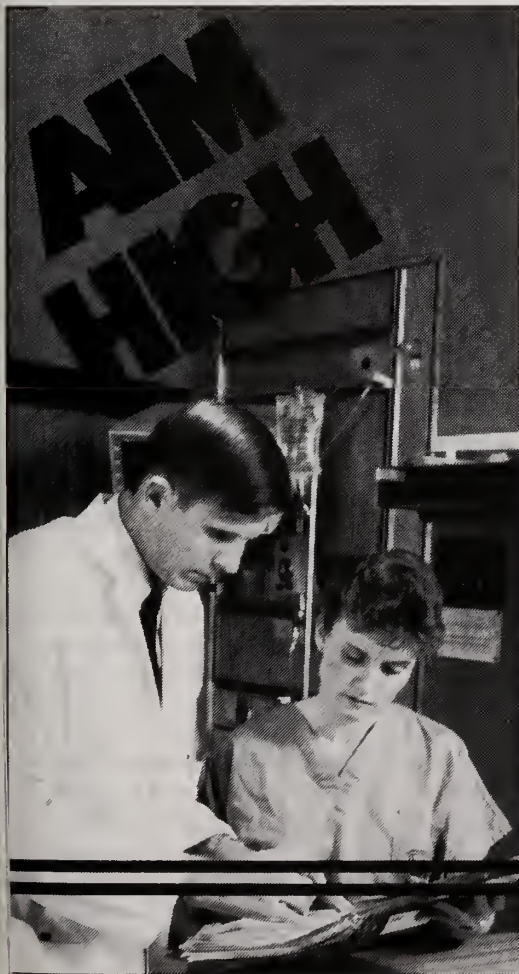
Full- or Part-Time Family Physician or Internal Medicine Physician for outpatient family practice clinics. No ob, no ER or hospital responsibilities. Very progressive north lakes practice located in Nisswa, Pequot Lakes, and Pine River, Minnesota. Contact Fred Huff, Pine and Lakes Clinics, Box 88, Pine River, MN 56474. 3-7/92

Clinical Physician Assistant: The Department of Surgery, University of Wisconsin-Madison Medical School, is recruiting a clinical physician assistant for its busy Orthopedic Clinic. This position requires an individual who is interested in a multispecialty approach to patient care that includes pediatrics, trauma, total joint, hand, and general orthopedics, as well as sports medicine and a broad spectrum of patients of all ages and with all types of illnesses/disabilities. No on-call or weekends required. May 1992 graduates are encouraged to apply. Candidates must have graduated from an accredited physician assistant program with eligibility for Wisconsin State licensure. Send letter of application and résumé to: Andrew McBeath, M.D., Chairman, Division of Orthopedic Surgery, University of Wisconsin Hospital & Clinics, Room G5/361 CSC, 600 Highland Avenue, Madison, WI 53792-3236; 608/263-1248. UW-Madison is an Equal Opportunity/Affirmative Action Employer. *1-6/92

General Internists: Four BC/BE needed to join 12 in multispecialty clinic in Iowa on the scenic bluffs of the Mississippi overlooking Illinois and Wisconsin. Come grow with us! Sixty-five physician owners manage clinic and HMO. Above average income potential, excellent call schedule, friendly, family lifestyle. Full benefits. Call or write Denis Albright, Director of Physician Recruiting, Medical Associates Clinic, P.C., 1000 Langworthy, Dubuque, IA 52001; 319/589-9981. *3-8/92

Doctor, Are You Ready to Look at Opportunities in the Southeast? Relocate this summer so you can enjoy life more this winter. For information, mail your CV to Fred Wellhausen, MedExec USA, Inc., Professional Recruiters for the Medical Profession, 1701 West Hillsboro Blvd., Suite 204, Deerfield Beach, FL 33442; 305/360-9980. *1-6/92

Pediatrics, General Surgery, Family Practice—Wisconsin: Single specialty groups seek BC/BE physicians for partnership in exceptional south central community. Shared call, fully equipped and staffed office, very competitive guaranteed salary, and comprehensive benefits package. **Family Practice—Minnesota:** Single specialty group practice in Minnesota River Valley community of 9,000 located 25



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600 West 98th Street, Suite 390
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COVER

American Indian Health lags behind that of other U.S. groups, states this month's cover story (page 14), which profiles four Minnesotans using innovative approaches to improve Indian health. Indian youth are the nation's most devastated group of teens, says Robert Blum, M.D., in this month's interview (page 7). Several communities are using results from his survey of Indian youth to modify local health programs.

Photo of Lisa Bush at the Minneapolis Indian Health Board clinic by Rob Levine.

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Land of Opportunity Struggles to Achieve Equality for All

Edmund C. Burke, M.D.

A visit to Ellis Island, now a national park, is indeed a moving experience. On a recent trip to New York, I had the opportunity to visit this restored monument, where many of our ancestors first stepped onto American soil. Ellis Island provides a window to the experience of the 10 million Americans who arrived between the years 1892 and 1929—as many as 5,000 immigrants on some days.

The United States boasts the world record for number of immigrants in recorded history—about 60 million to date. What compelled our ancestors to risk their lives in such an adventure? Immigrants have fled from starvation, religious persecution, military conscription, and poverty. They are still coming. During the years of Ellis Island, the immigrants were chiefly European, but since World War II, Asians and Hispanics have predominated. Many now come from Caribbean and South American countries as well.

Photographs at Ellis Island show the unbelievable crowding on the ships that arrived there daily. The steamship companies, anxious to make the most money possible, crammed the ships beyond capacity. Today, this would represent a public health official's worst nightmare. Infectious disease and lice were beyond control. But, despite the adversity, photos of the crowded conditions below deck suggest that pathos prevailed during such passages.

Other photos show families parting in Europe, perhaps never to see one another again. The passage from Hamburg was approximately \$50, a significant figure in those early years. A historical photo published recently in a Minneapolis newspaper showed a new house in 1912 selling for \$2,300. Rail fare from New York to



“Is our country truly
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all?”

Minnesota was about \$25.

The 20-minute film at Ellis Island, titled “Land of Hope and Tears,” is well worth watching. It is put together from bits of film from around the turn of the century and up to World War I. It is a touching portrayal of the immigrants, mostly Europeans, as they arrive in the new land, largely unprepared for the experiences awaiting them. In the theater we met a 92-year-old woman who had come through Ellis Island at age 6 and a man in his 80s who arrived in 1914. Imagine!

Entering Ellis Island was probably as frightening an experience as it was exciting. Few immigrants could speak or write English, and as a result, many lost their family names. Immigration officials gave these immigrants new names or abbreviated their old names.

Then there was the possibility of being sent home upon arrival. After interrogations and a physical exam, about 2 percent of these people were sent back for various reasons, such as disease, illiteracy, or lack of money, a job, or a sponsor in the new world.

Imagine the masses of non-English-speaking immigrants overloaded with personal baggage and sometimes babes in arm or children in hand. Extending from the island's great hall is a long stairway divided into three sections, one for those leaving New York by train or boat, one for those being shipped back home, and one for those staying in the New York area. At the bottom of the stairs, friends and family parted tearfully and at times forever. Ellis Island gives a sense of the often dangerous future that lay ahead for these newcomers as they headed out into a strange land, surrounded by unfamiliar faces and a new language. If you have a morning or afternoon available while in New York City, take the subway to Battery Park and board a boat in New York Harbor. Ellis Island is an experience you won't forget.

This month, *Minnesota Medicine* examines the health status of American Indians and programs aimed at improving Native American health. As I read these stories, Ellis Island takes on new symbolism, serving as a reminder of the many who suffered by the arrival of immigrants. Our forefathers came to America in search of a land of great hope and opportunity, but we must wonder whether our country is truly a land of equal opportunity for all. The relatively poor health status of American Indians is in part a result of poverty and loss of culture, says Dr. Robert Blum, director of Pediatrics and Adolescent Health at the University of Minnesota, in this month's interview (page 7). Despite the obstacles, there is hope. The four leaders in American Indian health care profiled in our feature story (page 14) are among many who are working to make this land what it has always portended to be: a land of equality.

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Native American Youth

Poor Health Carries a Powerful Message

Minnesota Medicine interviews Robert Blum, M.D., M.P.H., Ph.D.

American Indian youth are the nation's most devastated group of teenagers, says Robert Blum, M.D., director of the University of Minnesota's General Pediatrics and Adolescent Health Division. A survey of almost 14,000 American Indian and Alaska Native youth revealed high rates of risk factors related to unintentional injury, substance use, poor self-assessed health status, emotional distress, and suicide.

The study, which was commissioned by the U.S. Indian Health Service and published in the March 25 Journal of the American Medical Association, is the most extensive look ever at the health of American Indian youth. It included teenagers attending the seventh through 12th grades in nearly 350 nonurban schools in 15 states from Alaska to Mississippi. About 800 Indian teenagers from Minnesota's White Earth, Leech Lake, Fond du Lac, and Red Lake reservations participated. Dr. Blum, the study's principal investigator, says that although these students reported high rates of poor health, they are the "most successful" because they are still in school. The 40 percent of Indian students who drop out by the 12th grade were not surveyed.

In the following interview, Dr. Blum says he was stunned by the number of American Indian youth with severe problems. The majority are doing well, but these youth are about three times more likely than other groups surveyed to have severe distress in their lives. He also was surprised by the number of Indian youth who say they know someone who has died—11 percent compared with about 4.5 percent of kids in all of Minnesota.

An important discovery from the study, says Blum, is that poor health and poor school performance are strong predictors for other social problems, including drug use, pregnancy, depression, suicide attempts, and alcohol use. American Indian communities are using the study to develop health promotion programs to address these problems. "Many communities we visited said they needed support to come up with solutions that fit best within their structures and environments," says Blum. "They asked for the data so they could help the kids."

Minnesota Medicine: Dr. Blum, thank you for taking the time to talk with us about your recent study on the health of Native American youth. Please tell us about your background—about your education and your specialty training.



Robert Blum, M.D.

"What protects kids is success in school and connection with adult role models."

Blum: First of all, I'm a pediatrician. I did my pediatric residency at the University of Minnesota after I graduated from medical school at Howard University in Washington, D.C. I later received a master's degree in public health and a doctorate in health policy. I joined the University of Minnesota faculty in 1978, about the same time we had applied to the federal Maternal and Child Health Bureau to establish an adolescent health training program. We were awarded that grant, so I joined the faculty just as we began developing a program in adolescent health. The program is one of six in the nation with federal support. It's an interdisciplinary program, with physicians, nurses, social workers, psychologists, and nutritionists. In 1989, I was appointed director of the university's new Division of General Pediatrics and Adolescent Health.

Study Presents a Picture of Native American Youth Health

Minnesota Medicine: Your recent study of Native American youth has attracted a lot of attention. How did the study come about?

Blum: In the late 1980s, we undertook a very large study of adolescent health here in Minnesota. We surveyed approximately 36,000 teenagers. That study was supported by Maternal and Child Health in Washington. At that time, the Indian Health Service, which is headquartered very close to the Maternal and Child Health Bureau in Rockville, Maryland, expressed an interest in conducting a parallel study. They were interested in two things: first, in presenting a national picture of adolescent health in Native American communities, and second, in providing communities with the information

they need to develop health promotion programs.

Minnesota Medicine: I understand your study covered 15 states and included almost 14,000 Native American youth from rural areas. Were there any surprises as the study progressed?

Blum: There were quite a number of surprises and quite a number of things we found distressing. First, we were stunned by the large number of kids who had very severe problems. The majority of kids were doing well, but this teenage population had about three times the number of kids with severe distress than any other group we have ever surveyed. I'm talking about substance use, suicide, suicide attempts, depression, and a whole range of severe-risk behaviors. The second surprise was that, although free health care was available to all these young people, somehow that care was not readily accessible to them. For example, when we asked the Native American kids whether they'd seen a physician within the last two years, a much smaller percentage said yes than in rural Minnesota in general. Native American teens had fewer dental and eye examinations as well. The health services these kids need aren't available to them in a way they can use.

We also found that poor health is a very strong predictor of every single social problem we studied, whether it's drug use, pregnancy, depression, suicide attempts, alcohol use, or school failure. I'll give you some examples. Those kids who said their health is poor were two and one-half times more likely to have attempted suicide, four times more likely to have failed in school, two and one-half times more likely to be abusing drugs, and two times more likely to have been physically or sexually abused than those youths who say their health is OK or good. Poor health carries a very powerful message. These teens are not only physically ill, but, in general, their lives are not going well.

Minnesota Medicine: Was poor health their perception or was it a fact?

Blum: It's their perception. This was a survey, so all of the responses reflect perceptions, but you have to remember that the majority of teenagers in any community see themselves as very healthy. In Native American communities, significantly larger percentages define themselves as unhealthy than in any other group we've seen.

Indian Youth Face High Mortality Rates

Minnesota Medicine: How does this group compare with other American youths?

Blum: That's a tough question because we don't have a lot of good comparisons. National data for causes of death show the suicide rate among Native American youths who are 10 to 14 years of age is 6.9 per 100,000 compared with 1.8 for white youths and 0.8 for African

American youths. Death from injuries among these teenagers is more than two times that for either white or black teenagers. You see a pattern. Likewise, when you look at older Native American teenagers, aged 15 to 19, death from injuries is more than two times that for whites and more than four times that for African Americans. The same for suicide. The homicide rates are not radically different overall for African American and Native American teens. The one difference is in urban inner-city communities, where African American males have a much higher mortality rate than other groups. All in all, deaths from all causes among 15- to 19-year-old American Indian teenagers is 190.5 per 100,000, compared with 81 for white teens and 84.7 for African American teens.

Minnesota Medicine: Is there an obvious explanation for these differences or are the reasons subtle?

Blum: There are many explanations and many issues. Certainly, poverty is a major contributing factor; we cannot look at these data without being impressed by the poverty. But we're also seeing a loss of culture in many of these communities—a loss of connectedness. We also see in Native American communities that

death is such a common phenomenon that one in nine teenagers (11 percent) said they have had a parent or relative die. That compares with about 4.5 percent of teens in all of Minnesota. That's a huge number of kids. Likewise, many of these young people, about one in nine, have a friend or know someone who has committed suicide. This pattern contributes to the problem.

Minnesota Medicine: That's astounding. You've said that kids who do well in school are protected against a lot of negative influences. I'm sure there's more to this than meets the eye.

Blum: We tend to say students drop out of school because of such things as drug use or pregnancy. In truth, when you look more closely at the situation, you'll find teens who wind up heavily involved with drugs or any other negative behaviors are those who are failing in school. The difference between the teenagers who are doing well and those who are failing is pretty astounding. To measure school failure, we ask students this question: "Compared with other kids in your class, how well do you think you are doing?" Again, it's perception. Those who say they are doing poorly in school are two and one-half times more likely to be smoking cigarettes daily or weekly, are two times more likely to be drinking alcohol daily or weekly, are two times more likely to be smoking marijuana, are two and one-half times more likely to have attempted suicide, and are one and one-half times more likely to have been physically abused. The question is, what's the horse and what's the cart? As a clinician, my antenna goes up when I see a sixth-, seventh-, or eighth-grader who says, "I'm not doing well in school

compared with other kids in my class." That's a young person who's headed for big trouble. To me, the data are so clear that their message is really pretty incontrovertible.

Study Reveals a Window of Opportunity

Minnesota Medicine: Did the study suggest some areas of continuing focus?

Blum: Yes. For us to undertake a study like this and only come up with a litany of problems would be disastrous and of little contribution. We did find that Native American teens are pretty comparable with other teenagers in the seventh and eighth grades. But you begin to see a split, whether it's drinking behavior, marijuana use, delinquency, or self-destructive behavior, at the ninth grade. That says to us that there's a window of opportunity during which major health promotion interventions can be accomplished during the sixth, seventh, and eighth grades. Second, in community after community, we're finding Native American people who are extremely dedicated and are aware of the issues and problems. Many communities have created exciting and innovative programs, but they don't have all the resources they need. We currently don't provide support for identifying and assisting indigenous leadership. It's our sense that what protects kids is success in school and connection with adult role models, and we could be doing a lot more in these areas.

Minnesota Medicine: Do you believe Native Americans can provide some of the answers through their tribal organizations?

Blum: Yes. They are capable of finding solutions and are extremely anxious to do it. Many communities we visited, and we went only into communities that invited us, said they needed support to come up with solutions that fit best within their structures and environments. They asked for the data so they could help the young people of their communities. There is no abdication of responsibility. In fact, there is a very strong feeling in the communities that these are "our problems" and "our kids" and that the communities need to take on the problems themselves.

Data Are Well Received

Minnesota Medicine: How have the Native American communities reacted to the outcome of your study and the recommendations?

Blum: We received hundreds of letters, hundreds of phone calls from Native American communities across the country, as well as from others. The only negative letters we received were from two Anglo health care providers in areas with large Native American populations. Overall, our data were warmly received, but we sensed from the Native American communities that we were not telling them anything they didn't already know. They live these issues day to day. We put the problems on the agenda and, hopefully, have allowed them to be

addressed more forcefully at a national level. We all agree the communities need support to come up with solutions.

The Work Continues

Minnesota Medicine: What's next on your agenda? Are you going to pursue this further?

Blum: Very definitely. While we are doing other survey research, we are very much involved with and committed to working with Native American communities. To date, we have been invited back to six communities that have used the data, started interventions, and want us to follow up so they can hone their programs. I think that's very exciting.

Minnesota Medicine: Indeed it is. I'm not aware of anything similar that's taken place in recent years.

Blum: There really hasn't been. This is certainly the largest and most broad-based study of its kind ever undertaken.

Minnesota Medicine: You didn't cover the urban population, nor did you cover high school dropouts. Do you have plans to deal with these populations?

Blum: There is a pressing need to do that, and we would very much like to do it. In truth, part of the reason we haven't addressed those populations is because it is extremely expensive. It involves tracking people who are not in identified clusters, like schools. We know that by the 12th grade, more than 40 percent of Native American kids will have dropped out. We need much better information on urban teens because half of all American Indians live in cities, not on reservations. These areas are priority for us.

Change Forthcoming, But Slow

Minnesota Medicine: Are you optimistic that the health of Native American youths is improving, or will the problems continue to get worse before they get better?

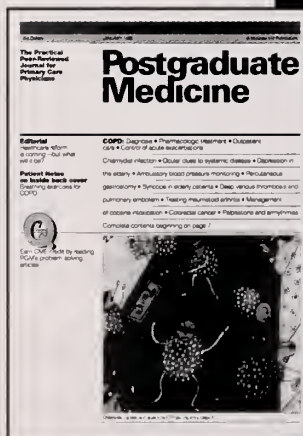
Blum: My optimism is guarded. I am excited by the energy, the potential, and the commitment of many people, both Indian and Anglo, who work at the local level. However, American Indians and Alaska Natives represent a small percent—only 1 percent—of our population, and it's an easy population to pity, to romanticize, and to ignore. Therein lies my concern.

Minnesota Medicine: Has your study been a catalyst for change?

Blum: Yes, both locally and nationally. In reservation communities around the country, our data have been used to develop new programs, to set program priorities, and to seek new grants and funds for programs. Nationally, the Committee on the Interior of the House of Representatives has held a hearing on Native American youth health, and we are optimistic that new authorizing legislation and added appropriations will be forthcoming.

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Thought for Food

Robert O. Fisch, M.D.

Hardly a single TV commercial does not focus on some way to lose weight. The pressures on people to lose weight are overwhelming, and slimness has become the hallmark of beauty. Billions are spent (mostly in vain) on losing fat tissue. This social pressure has now reached medical circles as well.

Insurance charts, statistics, pamphlets, and articles all seem to focus on different nutrients that may have either beneficial or detrimental consequences in the fight against fat or that may help maintain certain organs or even life itself. Today, the customer for the tasteless, unappealing but healthy, uncooked organic mishmash expects to pay a high price for the products. Meanwhile, the host and hostess of the gourmet dinner apologize to their guests for the unhealthy ingredients in their feast.

I have heard that an obese person's "success" rate for losing weight is no better than the "cure" rate for lung cancer—about 3 percent. I attended a symposium at which young residents presented obesity like a disease that simply needs to be controlled by a concerned physician and a dietitian. Nothing could be further from reality.

Watch a nature program on television, and what do you see? The animal parents supply food, and the offspring eats and eats; when the offspring grows up, it attacks, eats, and stores within its body (and elsewhere) more food than it requires. When you watch your child eat, you have a warm feeling of being a provider. The more you can provide, the better. I daily encounter parents from many parts of the world whose only concern for their healthy children with excellent growth is that the children do not eat well. Only very rarely is a parent concerned because a child eats too much.

I see PKU children from their very first week of life. They all eat some artificial foods, and each child receives a certain amount based on that child's weight. Later, some of the children are obese and some slim; some have small heads and some large. This suggests that the

differences are caused by genetically dominant forces rather than by the intake of specific foods. Approximately 20 percent of PKU children are obese, similar to non-PKU children, in spite of more precise control and education concerning the PKU child's diet.

When you reach for peanuts or other snack food

while watching a game, you are not eating because you are hungry. And after you eat something pleasant, you don't stop when you are full, but an inner urge forces you to eat more than you really need. The natural desire is not to stop, but to continue eating. This is not a weakness. It is a genetically determined, chemically enforced physiological function. Besides, eating is one of the most common pleasures of our senses.

We have a built-in need to feed ourselves beyond what is essential. When food becomes less readily available, the body's requirement decreases in order to protect and main-

tain the balance of energy and to urge the body to obtain more food. Thus, the attempt to counteract obesity through diet is likely doomed to fail. Biologically, we are built for an environment of the past, one in which food was obtained by struggle and was not as abundant or as close as the neighborhood grocery.

Besides being genetically programmed to eat in order to store and conserve energy, we also tend to automatically move in ways that save energy. This was amply demonstrated one winter day when I showed my visiting brother the Como Zoo. From a glass window below the water level, we watched a polar bear swimming. The bear's motions were monotonous: He pushed himself down through the water with his right rear foot, then came straight up from below using his left rear foot, then turned on his back and repeated the motion over and over again without ever changing his routine, pace, or timing in the slightest. "You see," my brother said, "he uses the least energy, the shortest route and, there-



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fore, repeats himself precisely the same way every time." Similarly, a predator will attack as long as the effort of making the kill requires less energy than what the predator expects to gain in nutrient value from the prey; otherwise, it will give up the chase.

Human beings also tend to be efficient in many of their movements. I have noticed that in the office, in the kitchen, in the bathroom—everywhere—people work out a routine that becomes almost automatic. We follow the same steps, go through the same processes, in order to perform daily activities most efficiently and with the least effort. And we take shortcuts—for example, moving diagonally across a space instead of going around a corner. We want to conserve energy, so we simplify and automate our activities; this can be done most effectively with a familiar pattern that requires no conscious thought.

Because many of our eating and moving behaviors are automatic, we should have more time and energy to spend on exercise and diet. I once heard a radio announcer say that if you do appropriate exercises and eat the right foods, when you die, an autopsy will not identify the cause of death. Until we learn the actual biological mechanisms and identify individuals' nutritional and exercise requirements, our concern should not be how to die but how to live.

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Robert Fisch is a professor of pediatrics at the University of Minnesota and a staff member at St. Paul-Ramsey Medical Center.

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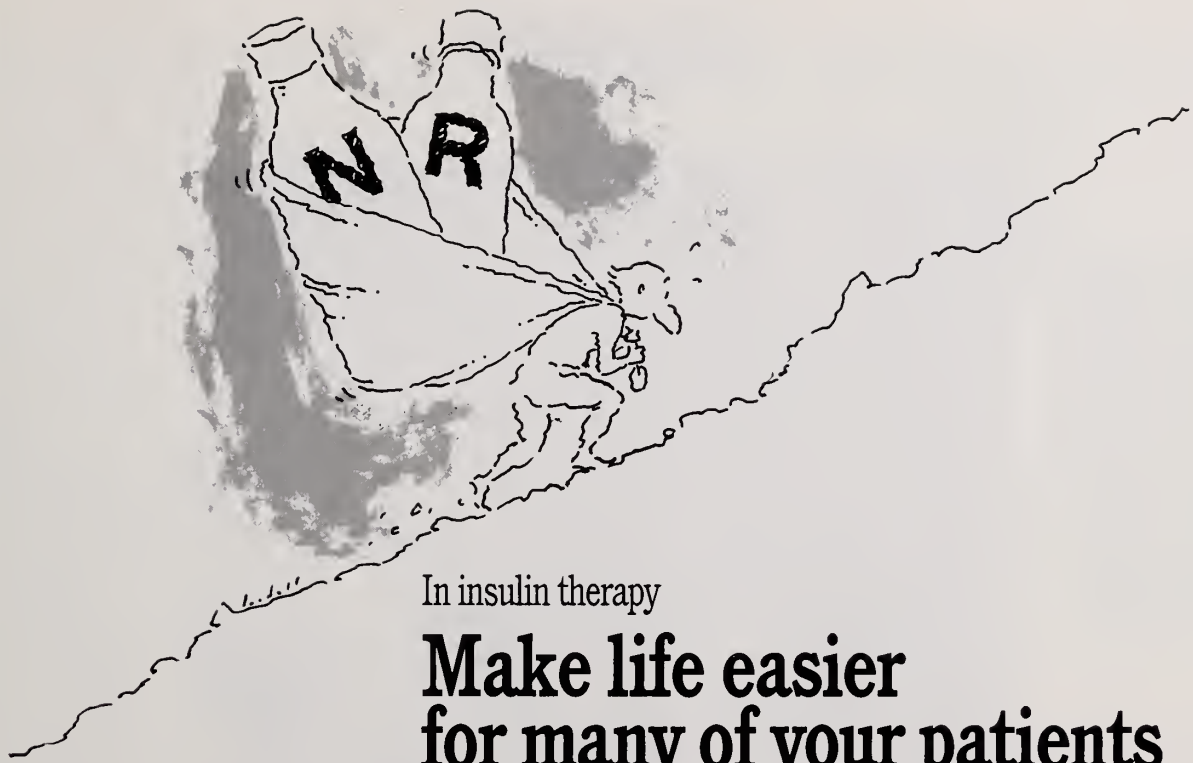
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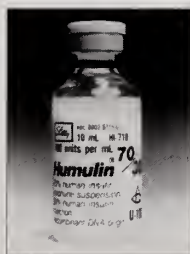


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ROB LEVINE

American Indian

Health *Providers, Communities* *Surmount Profound Problems*



By Joseph Moriarity

Minnesota's urban and rural Indian communities today face a similar set of complex and daunting health problems. No one overriding issue exists, nor does an overall solution. While staff shortages, a dire lack of Indian health professionals, and inadequate financial resources play a role, poverty, racism, lifestyle, alcoholism, and cultural change and conflict all further complicate health problems for Indian people.

The problems are severe. Consider these statistics compiled by the Indian Health Service (IHS), a U.S. government agency created in 1955 to provide comprehensive health care for members of federally recognized Indian tribes and Alaska natives.

- The infant mortality rate among Indian people is 26 percent higher than that among all other U.S. people.

- The life expectancy of Indian people is about four years less than that of the general U.S. population.

- The suicide rate in areas served by IHS in 1987 was more than twice that of the U.S. average.

- Between one-third and one-half of the adult Indian population is diabetic.

- Ninety-five percent of American Indian families are affected by the abuse of alcohol or other drugs.

- The one million people using the Indian Health Service are still considered among the most economically impoverished in the United States, yet IHS receives from the federal government 25 percent less money per capita than the nation's average per capita health care spending. What's more, because the IHS is mandated to serve primarily Indian people living in rural areas, urban Indians, who make up nearly half the country's Indian population, are scarcely touched by IHS.

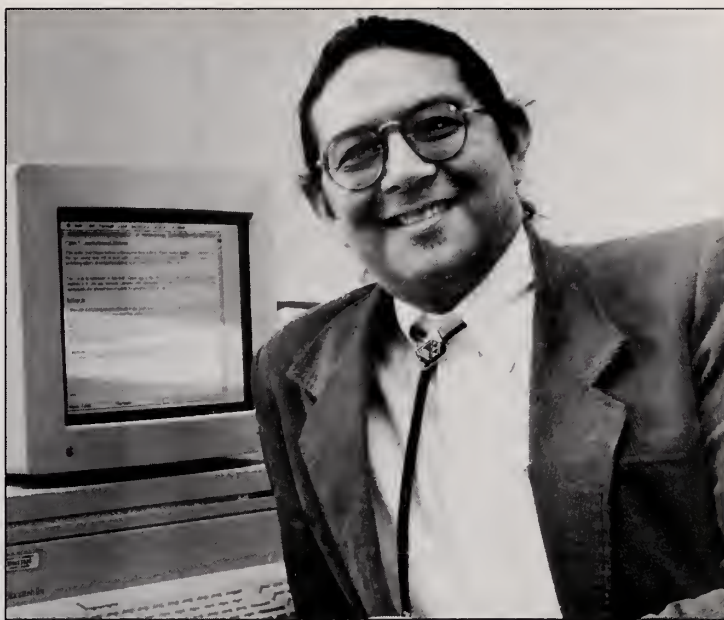
In the face of a seemingly hopeless situation, Indian communities are nevertheless finding the means to meet their health problems with creative and diverse approaches.

"Some of the best things that are happening in this country in terms of people taking charge of their lives and making positive changes are happening in rural and urban Indian communities," says the Bemidji Area IHS director, Kathleen Annette, M.D., "though few Americans realize this."

Minnesota Medicine interviewed Annette and three other Minnesotans who, while working in different settings with different areas of focus, are each firmly committed to the overarching goal of improving Indian people's health. Their profiles reveal how the positive changes Annette speaks of spring from personal pride, individual and community empowerment, community-building, resource maximization, innovative programming, and the work of dedicated individuals.

Their successes testify to the many financial and community benefits of prevention and early intervention and reveal the importance of teamwork among communities and professionals.

These four believe the IHS model of health care delivery exemplifies a system that really serves the people, and that its achievements can be an inspiration to a struggling "majority" medical system that is plagued by high costs, that seems unable or unwilling to focus on intervention and prevention, and that fails to provide adequate care to tens of millions of rural and urban Americans.



KEN MORAN, UNIVERSITY OF MINNESOTA-DULUTH

Gerald Hill, M.D., helps meet Indian medical students' needs.



IN 1971, FOUR YEARS BEFORE GERALD HILL, M.D., a Klamath tribe member from Oregon, began medical school, the United States had 14 Indian physicians. The situation had improved only slightly 18 years later, when Hill came to the University of Minnesota-Duluth School of Medicine to direct the Center of American Indian and Minority Health, a program designed to recruit, train, and graduate Indian physicians; there were about 400 Indian M.D.s nationwide at that time, but that was still only 0.08 percent of all doctors. "I saw the UMD program as an opportunity to do something that hadn't ever been done: to make an impact on medical education itself," says Hill.

Closely connected to this lack of Indian physicians is a chronic shortage of physicians working in the Indian Health Service. According to Hill, the problem is one of retention, not numbers. Most of the 850 IHS doctors are non-Indian, and they generally spend only two to four years on a reservation. "I don't by any means fault them for that," says Hill. "It's not easy to spend five, 10, or more years living in another culture." As a result, however, the IHS must recruit about 350 new doctors each year.

Hill is convinced that the solution is to have Indian physicians delivering care to Indian patients, not just because of what they can do in direct health care services, but because of the health leadership roles they can play in their communities. "If only half the 35 to 50 Indian students currently graduating per year from medical schools nationally went into IHS and stayed 10 to 12 years," says Hill, "within 10 years, the current staffing needs would virtually be met."

To reach its goal, Hill's program addresses three main issues: recruiting American Indian students, graduating those who enroll, and adjusting the medical school program to fit both the needs of the Indian students while they're in the program and the needs of the communities in which they'll someday practice.

Identification and recruitment efforts are still in their early stages, but already there are signs of success: seven of UMD's 50 first-year medical students are Indian, and Hill expects five new enrollees this fall, which places the program 25 percent ahead of its 1991-92 recruitment goal.

Once they are in medical school, Hill says he tells the students, "If you want to be a doc, this is the path you have to walk. I don't walk it for you. I'll smooth it a bit, help you understand the barriers, but you have to do it."

To smooth that road, Hill is instituting changes and developing programs based on the type of support he wished was available to him when he went through medical school. For example, students attend seminars on health problems of particular concern in Indian communities, such as cardiovascular disease, fetal alcohol syndrome, diabetes, and tuberculosis. They study the IHS and related funding, political, and health issues. In addition, students can work with a physician on a reservation during the summer, which gives them an opportunity to begin integrating what they are learning in the classroom with the reality of health care as it's delivered in Indian communities, and it helps them to stay connected with their own culture. "By the time they've gone through our program," says Hill, "the students have, in essence, become experts on Indian health. They can then make an informed decision about going back to work on a reservation, and if they go back, they'll know what to expect and what to do."

Students also explore the integration of traditional Indian medicine and Western medicine. "Indian people recognize each system's strengths and refer back and forth," says Hill. "Generally, the fear and conflict tend to come from the Western physicians. The traditional medicine people tend to respect Western medicine, recognizing that physicians and medicine men are both working to help people."

Hill has introduced other changes critical to Indian students' educational and professional success. "The standard medical training assumes that the students will be dealing with the majority population," Hill explains, "and so students are taught interpersonal skills appropriate to that culture: how to talk to people, touch them, make eye contact with them, and so on. But Indian people's cultural rules are different. What Indian students learn may not only be unhelpful, but actually detrimental. Our students get a parallel education that enables them to work in both cultures."

The UMD program is succeeding at recruiting and graduating Indian physicians, but will these students choose to practice in Indian communities? "Those in our program intend to be involved in Indian health in some capacity," says Hill, "and that can mean practicing on a reservation, working for IHS, or working in a position such as mine."



Kathleen Annette, M.D., helps tribes help themselves.



"IF YOU'D HAVE ASKED ME SIX YEARS AGO IF I'D ever be an area director in the Indian Health Service, I'd have said, 'No way!'" exclaims Kathleen Annette, M.D., a family physician and a member of the Minnesota Chippewa tribe enrolled with the White Earth Band. "I really liked practicing medicine. But more than practicing medicine as such, I wanted to help better Indian people's health."

Annette's dream of becoming a doctor began during childhood on the Red Lake Indian Reservation north of Bemidji, Minnesota. After graduating from Red Lake High School in 1973, Annette went on to complete her undergraduate degree and her first two years of medical school at the University of Minnesota-Duluth. In 1980-81, she took a break from school and returned to her family. "Because we are pulled in so many directions, school can be very difficult for Indian students," says Annette. "Those two years off made all the difference in terms of my personal growth."

Annette returned to medical school at the university's main campus in Minneapolis, where she earned her M.D. degree and became Minnesota's first female Ojibwe physician. Following a three-year residency at the Duluth Family Practice Center, Annette took up her practice in Cass Lake, Minnesota, on the Leech Lake Reservation in 1986. Four years later, with the encouragement of her tribal elders, Annette accepted a position as the director of the IHS Bemidji Area, one of 12 IHS areas in the United States. She now oversees health services for 29 tribes in Minnesota, Wisconsin, and Michigan.

According to Annette, the IHS mission is twofold: to elevate the health of Indians to the highest level possible through the medical services it funds and provides, and to advocate for "638 contracting." Through the Indian Self-Determination and Education Assistance Act of

1975, generally referred to as the "638 law," American Indian tribes and Alaska natives now have the option of organizing and operating health care programs in their communities. The IHS was originally created in 1955 to itself provide comprehensive health care for federally recognized Indian tribes and Alaska natives living in rural settings.

"More and more, Indian people are saying that IHS is not responsible for Indian health—Indian people themselves are responsible," says Annette. "If we abdicate that responsibility, then we won't get the responsibility that ownership gives."

This evolution is part of a trend that Annette and others say is leading more and more Indian people to take responsibility for their health, their well-being, and their communities. Although Annette strongly believes in this mission, she recognizes that its goals will be achieved slowly. Not all tribes are choosing 638 control, preferring instead to let IHS organize and provide some or all of their health services.

"I encourage tribes who think they're ready to take over a program to do so," says Annette. "But if we relinquish the direct responsibility, then we have to be ready with resources and support as needed. The role of IHS is to advocate strongly for Indian people's health and to provide the best possible consulting and technical support for the programs they set up and run." The Bemidji Area, for example, has a medical consultant who helps with health care standards and quality improvement, as well as consultants in pharmacy, mental health, audiology, quality control, and environmental health.

The media give the impression that the problems on reservations are so overwhelming that the tribes aren't capable of solving them, but anyone who looks closely at what's going on will find that's simply no longer the case, says Annette. "There are many productive Indian people doing wonderful work, but they aren't very visible. We are managing to work with and around our problems to educate our youth, to enable sterling leaders to emerge, to advocate and run 638 programs, to provide social services, and to address domestic problems."

A relatively small IHS staff means Annette must work hand in hand with the tribes to develop and carry out programs they need. This cooperative relationship between the IHS and the tribes was tenuous when Annette took over IHS leadership. The question was about money—not so much about inappropriate spending but simply how funding allocation decisions were made—and it was about trust. "Many leaders didn't feel they had any input into decisions," says Annette, "so a Tribal Advisory Board was formed with whom we now discuss and negotiate all proposals to get mutually acceptable solutions. I can't do this job alone. I need their help." As a result, a strong, cooperative relationship has grown over the past two years between the tribes and IHS staff.

Annette's leadership style meshes well with recent changes in the Indian Health Service's management approach. Rather than giving tribes and IHS area units a list of programs to implement, the national director's

office asks them to state their objectives and approaches in dealing with a given problem. "This gives us at the local level the opportunity to decide on a focus and a response appropriate for our own tribe and circumstances—and then to allocate resources accordingly," says Annette.

Annette's responsibilities take her throughout the country for meetings and speaking engagements, an enormous change for someone who seldom left the Red Lake Reservation as a child and young adult. Now when she goes home, friends and family sometimes ask her how she handles all the responsibility of her position. "I don't think it's really so bad at all," she says. "I tell them to try delivering a baby that won't deliver—now that's responsibility!" Annette also recognizes her importance as a role model for many young Indians, so many of whom are asking, "Does anybody really care?" she says. "My answer to that is that people do care, and that one individual can and does make a difference."



ROB LEVINE

Norine Smith received an Eagle Staff from a Lacota medicine man, a symbol she has earned warrior status.



THE MINNEAPOLIS INDIAN HEALTH BOARD (IHB), a private, nonprofit organization, was founded in 1971 by a group of Indian people to provide comprehensive health services to the Twin Cities Indian community. Under the leadership of Norine Smith, IHB's executive director since 1975 and an Ojibwe born and raised on the Red Lake Reservation in northern Minnesota, the IHB currently serves nearly 8,000 clients annually and is recognized nationally for its success in

meeting urban Indian health needs. IHB's services include primary medical care, dental care, health education, counseling and support groups, youth programs, community outreach, and transportation for clients to and from IHB.

Based on her experience as an Indian Health Service Advisory Board member and her contacts with the various tribal organizations, Smith says IHB's urban clients face problems similar to those of Indian people living on Minnesota's reservations—poverty, alcoholism, lack of education, unemployment, and so on. IHB faces similar problems in delivering care as well, except for one major difference: the availability of financial resources.

"Unlike the reservations, IHB receives very little Indian Health Service funding," Smith explains. "Less than 5 percent of our operating budget comes from the IHS, so we have become very creative fundraisers." In fiscal 1990-91, IHB received more than \$3.2 million through grants and in-kind contributions from more than 200 sources, including individuals, foundations, corporations, and the state.

The scope and direction of IHB services have changed recently to reflect a better understanding of Indian health problems. This change is based on research Smith conducted four years ago to determine how much difference the IHB was actually making in improving the health of

many of the factors affecting our health as possible."

Under Smith's direction, the IHB began with an intensified intervention and prevention program that included more health screenings, outreach services, well-child care, family planning, dental care, WIC, and nutritional counseling. Recognizing that mental and physical health are inseparable, IHB now has a comprehensive counseling and support clinic. It offers individual, family, and group therapy; crisis intervention; consultations and visits with a traditional medicine man; chemical dependency assessment and referral; social work services and outreach; and more.

To further arrest the poverty-alcoholism cycle, IHB moved well beyond the service scope of traditional private-sector health clinics and into the realm of public education. IHB worked closely with the Minneapolis Public Schools and played a key role in the establishment of the K-8 Four Winds School, an Indian magnet school housed in the old Mount Sinai

Hospital and previously known as Mount Sinai. The school offers programs designed to attract Indian students and serve their cultural and educational needs.

"We work very closely with the school because we know that excellence in education is a key to breaking the poverty cycle and in getting Indians into the health professions," explains Smith. "We help them get caught up and stay in school by monitoring their grades and providing one-on-one tutoring."

Because many students come from dysfunctional families, IHB counseling staff now go to the school daily to hold counseling sessions. The establishment of regular contact with the students in school also gives IHB staff a perfect opportunity to talk about health issues such as nutrition; the effects of nicotine, alcohol, and other drugs; sexuality; and diabetes prevention and control.

Through early intervention to provide needed education and therapy, Smith says, "I hope we can teach our kids to own their feelings and find constructive ways to deal with them. They'll know they're not victims and that they *can* make positive choices. Perhaps they will avoid walking the painful road of alcoholism and other destructive behaviors and become

healthier, more fully functioning human beings." Already Smith sees some positive signs. "Students who once had very bad school behavior problems are not only turning around," she says, "they are becoming role models for other Indian kids."

Smith feared that contact and intervention with

"Excellence in education is a key to breaking the poverty cycle and in getting Indians into the health professions."

—Norine Smith



ROBLEVINE

Indians. The results showed slight improvements, but nothing significant. "After further analyzing the data," says Smith, "we found that it's not so much chronic diseases that are killing us as it is our lifestyle—a lifestyle related to poverty and alcoholism. We realized that if the IHB was to have a major impact, we had to address as

families might be threatening or frightening. Instead, the opposite happened. "Families are very excited about these programs," Smith explains. "Because they, too, want to learn how to break the cycle they're in, we're seeing tremendous participation in both health programs and in traditional activities such as storytelling and talking circles."

Although she sees many signs of progress, Smith admits she has a wish list that, if fulfilled, would make her work much easier and more effective. "With more money in the direct care medical area," says Smith, "I'd add another doctor, and I'd bring in on-site X-ray capabilities, a pharmacy, and an eye care clinic to handle the many diabetes-related eye problems we need to treat." Also needed are more counselors at the schools for day-therapy. "We're still only touching the tip of the iceberg there," she says.



Diane Pittman, M.D., emphasizes community involvement.



FAMILY PHYSICIAN DIANE PITTMAN, M.D., attended medical school at Tulane University in Louisiana under the National Health Service scholarship program and graduated with an obligation to work four years in the Indian Health Service. Now, after more than seven years at the Cass Lake Public Health Service Indian Hospital on the Leech Lake Indian Reservation, Pittman remains enthusiastic about her work and at this point has no plans to leave.

Four or five years ago, however, Pittman concedes she might have told a different story, one that illustrates the difficulties IHS faces in keeping non-Indian staff. "As a white person working in a different culture, it took a long time for me to adjust to the cultural differences and to gain people's trust." After three years or so, however,

the tide turned. "Now, the job is gratifying, both personally and professionally," says Pittman. "I work with a high-risk population, so I can regularly use all my skills. There's a genuine family orientation in the community and excellent continuity of care."

Pittman believes the Cass Lake hospital and clinic provide a much wider range of services than private-sector clinics serving economically similar populations. Its services include public health nursing, nutrition counseling, WIC, and mental health and chemical dependency counseling in addition to primary care provided by five full-time and two part-time physicians.

An emphasis on comprehensive preventive care and community involvement and responsibility has resulted in innovative programs that meet the Cass Lake Indian community's particular needs. By piecing together a checkerboard of state grants, Pittman, public health nurse Roleen Walgenbach, and others recently helped create a comprehensive teen health program. Key to the program are school-based clinics that offer sex education, treatment and prevention of STDs, pregnancy prevention information, chemical dependency identification and referral, contraception for those who are sexually active, as well as screening and treatment for colds, earaches, and other health problems.

The clinic also started a center for diabetes management and prevention that has become a national model for other Indian communities battling the disease. It offers community-wide screenings, education in self-monitoring and care, an exercise program for diabetics and those at risk for the disease, and even special shoes.

Teen parenting programs on the reservation offer support and include a national award-winning video called the *Circle of Life*. Staff believe the parenting programs will be effective in interrupting the cycles of family abuse. "When teens from dysfunctional families get pregnant, they often become dysfunctional parents unless they get guidance in better parenting techniques," says Pittman. "While we might not see the change for another 10 or 20 years, the next generation will benefit enormously."

The programs reflect Pittman's style and philosophy on health care and community improvement and model what she hopes to accomplish in her work. "The neat thing was, I had only a small role, and the kids did the rest," she says. "Our country's orientation is that it's experts who fix problems, and the rest of the people don't have any ability to help themselves. Well, that's just not true. The solutions are in the same place as the problems. We're working hard to get people to understand that these are community problems we as a community must address."

The health professionals need to recognize their

JOSEPH MORIARTY

limits, too, says Pittman, "and that's hard for us to do. There's not a lot a doctor can do to make diabetes better, for example. We can make blood sugars better with medicine; we can treat complications of the disease. I tell my patients that diabetes is not a doctor's disease. A doctor's disease is appendicitis: there's nothing you can do to prevent it, and when you've got it, you need the skills of a doctor to fix it. There are things that will make diabetes better: diet, exercise, and weight loss, but I can't do them. Part of doing my job well is helping people understand where my responsibility ends and theirs begins, and vice versa."

While acknowledging her successes, Pittman often feels deep frustrations stemming from lack of money, staff, and other resources. "We're simply unable to intervene sometimes even though we know we could help. And then, eventually, we see the inevitable result of no action—a rollover with three or four deaths, for example. That's really, *really* depressing because it doesn't need to happen."

Many problems Pittman helps patients handle are also rooted in abuse, low self-esteem, and family violence, but shortages in mental health staff mean that only

those in most desperate need get help. Those who aren't yet in crisis but who would benefit enormously from intervention are neglected.

"Part of doing my
job well is helping
people understand
where my
responsibility ends
and theirs begins,
and vice versa."

—Diane Pittman, M.D.

Looking back on her seven-plus years at Cass Lake, Pittman says she's come to certain realizations about herself and her work. "If you're an 'immediate-gratification' person, forget it. Coming out of medical school well-educated and full of great ideas, I thought that with enough love and energy, I could fix everything! You do that for a few years and you either get burned out and leave, or you change your expectations.

"And, ironically, the more I let go of trying to make things happen and concentrate instead on relationships and handing back to people their responsibilities, the more things start to change and improve in the ways I want them to. Empowering people is a spiritual process that requires an act of faith—investing time and energy without a guaranteed return."

MM

Joseph Moriarity is a free-lance writer and editor living in Marine on St. Croix, Minnesota.

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1. Benson RC Jr. Laser photodynamic therapy for bladder cancer. *Mayo Clinic Proc* 1986;61:859-64.
2. Guttormson NL, Bubrick MP. Mortality from ischemic colitis. *Dis Colon & Rectum*, to be published.
3. Chatterjee SN. Use of GOR-TEX grafts as vascular access procedure for chronic hemodialysis. Abstract of a paper submitted to the European Society for Artificial Organs Eighth Annual Meeting, Copenhagen, August, 1981.
4. Thompson NW. Thyroid and parathyroid. In: Welch KJ, Randolph JG, Ravitch MM, et al., eds. *Pediatric Surgery*, 4th ed. Chicago: Year Book Medical, 1986: vol 1, 522-33.

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Method of Intraoperative Monitoring of Neuromuscular Function and Residual Blockade in the Recovery Room

Keith A. Jones, M.D., Robert L. Lennon, D.O., and Michael P. Hosking, M.D.

ABSTRACT

We evaluated the method used intraoperatively to assess the degree of neuromuscular blockade prior to pharmacologic reversal to determine its role in preventing residual blockade in the postanesthesia care unit (PACU). We studied 38 patients who received a nondepolarizing muscle relaxant during general anesthesia for carotid endarterectomy or thoracotomy. The anesthesiologist assessed the degree of neuromuscular blockade intraoperatively prior to pharmacologic reversal either by the standard method of visually counting the number of evoked thumb twitches elicited by supramaximal train-of-four stimulation of the ulnar nerve (i.e., thumb train-of-four count), or by an alternative method such as 1) visually counting the number of evoked orbicularis oculi muscle twitches elicited by supramaximal train-of-four stimulation of the facial nerve, or 2) observing the patient for clinical evidence of partial recovery (e.g., swallowing or attempts to breathe). Residual blockade in the PACU was defined as 1) a train-of-four ratio <0.70 (measured by a mechanomyograph), or 2) the inability of the patient to perform clinical tests of neuromuscular function (e.g., a sustained head lift for 5 seconds) and evidence of neuromuscular weakness that was resolved following administration of edrophonium. Five of the 22 patients (23%) in whom one of the alternative methods was used had residual blockade in the PACU; none of the 16 patients with a thumb train-of-four count of 3 or 4 before pharmacologic reversal of NMB had residual blockade in the PACU ($p < 0.05$). We conclude that methods other than determining a thumb train-of-four count of 3 or 4 prior to pharmacologic reversal of neuromuscular blockade may be associated with residual blockade in the PACU.

Previous reports have documented the occurrence of residual blockade during recovery from general anesthesia.^{1,2} In one study, 30 of 72 patients (42%) had evidence of residual blockade upon arrival in the postanesthesia care unit (PACU), some of whom required additional doses of reversal agents and supportive maneuvers to relieve upper airway obstruction.¹ Since these original studies, intraoperative monitoring of neuromuscular blockade with a peripheral nerve stimulator has become an established and frequently utilized part of anesthetic practice.³ Typically, four supramaximal, square-wave pulses of 0.2 ms duration are delivered at a frequency of 2 Hz for 2 seconds to the ulnar nerve, and the number of adductor pollicis muscle (thumb) twitches elicited is visually observed and counted (i.e., thumb train-of-four count).⁴ In a nonparalyzed patient, four short and equal twitches are elicited; in a partially paralyzed patient, each evoked twitch is weaker than the preceding one (i.e., there is fade in the train-of-four response); in a completely paralyzed patient, only one or two twitches can be elicited.

The ability to completely reverse a nondepolarizing neuromuscular block pharmacologically depends on the degree of blockade at the time of reversal.⁵⁻⁸ Rupp et al. demonstrated that when the force (as measured by a force transducer) of the single thumb twitch during spontaneous recovery from a nondepolarizing neuromuscular block induced with pancuronium is $\geq 11\%$ of the pre-blockade control value, the time (mean $\pm$ SD) from administration of neostigmine 0.04 mg/kg iv to complete recovery to the control value is 3.9 ± 1.6 minutes. In contrast, when the force of the single thumb twitch is $<11\%$, 7.0 ± 2.2

minutes are required for complete recovery.⁵ In addition, others have shown that when the thumb train-of-four count is 4, the force of the single thumb twitch is at least 25% of the pre-blockade control value, and when only one twitch could be visualized, there is more than 90% suppression of the single thumb twitch.⁹ In light of these observations, we hypothesized that the use of a peripheral nerve stimulator to determine a thumb train-of-four count of 3 or 4 prior to pharmacologic reversal of nondepolarizing neuromuscular blockade would ensure adequate reversal and, thus, reduce the incidence of residual blockade in the PACU.

For some patients undergoing carotid endarterectomy or thoracotomy procedures at our institution, surgical positioning requirements may limit access to the forearm or hand. Thus, assessing the degree of neuromuscular blockade by determining the thumb train-of-four count prior to pharmacologic reversal frequently is not possible, and a variety of alternative methods are utilized. These alternatives typically include 1) visually counting the number of evoked orbicularis oculi muscle twitches elicited by supramaximal train-of-four stimulation of the facial nerve, or 2) observing the patient for clinical evidence of partial recovery, such as swallowing or attempts to breathe. These different approaches allowed for blinded randomization of patients into two groups: patients whose thumb train-of-four counts could be determined prior to pharmacologic reversal of nondepolarizing neuromuscular blockade and patients who required the alternative methods. In this study, we evaluated the method used intraoperatively to assess the degree of neuromuscular blockade prior to

pharmacologic reversal to determine its role in preventing residual blockade in the PACU.

Methods

For this study (approved by the Mayo Clinic Institutional Review Board), we evaluated all patients who received a nondepolarizing muscle relaxant during general anesthesia for carotid endarterectomy or thoracotomy, and who resumed spontaneous breathing and were extubated in the operating room. The complete anesthetic management of the study patients, including the choice and dosage of muscle relaxant and the method used to assess the degree of neuromuscular blockade prior to pharmacologic reversal, was at the discretion of the anesthesiologist, who was not aware of the PACU evaluation of neuromuscular function in these patients. Patients who were pregnant or had a history of neuromuscular, renal, or hepatic disease were excluded from the study.

We used train-of-four ratio and clinical tests of neuromuscular function to identify patients with residual blockade in the PACU. Immediately upon the patient's arrival in the PACU, the ulnar nerve was stimulated supramaximally via surface electrodes at the wrist using the standard train-of-four stimulus pattern (i.e., four square-wave pulses of 0.2 ms duration at a frequency of 2 Hz for 2 seconds).⁴ This stimulus pattern was repeated every 12 seconds until a stable assessment could be made, which usually required 1 to 2 minutes. The force of the evoked thumb twitches was quantified with a Grass® FT₁₀ force transducer (Grass Instrument Company, Quincy, Massachusetts) and recorded on a Gould® Brush 2400 strip chart recorder (Gould, Cleveland, Ohio). The train-of-four ratio was expressed as the ratio of the force of the fourth twitch to the force of the first twitch for each sequence of four contractions.⁴

The clinical tests of neuromuscular function were performed on all patients. The tests included an assessment of hand-grip strength and of the patients' ability to perform a sustained head lift for 5 seconds, protrude the tongue, and cough. The

patients' performance of each test was recorded as "normal" or "weak." The entire assessment of neuromuscular function was completed within 5 minutes of patients' arrival in the PACU.

Patients were considered to have residual blockade if the train-of-four ratio was <0.70 , or if they were unable to successfully perform three or more of the clinical tests of neuromuscular function *and* had evidence of neuromuscular weakness (i.e., shortness of breath, upper airway obstruction) that was resolved following administration of edrophonium 0.5-1.0 mg/kg. In patients with residual blockade, neuromuscular function was monitored until the train-of-four ratio exceeded 0.70 and the patient was able to successfully perform all four clinical tests of neuromuscular function.

One of the investigators anonymously observed the anesthesia personnel during the later stages of anesthesia to determine whether a thumb train-of-four count of 3 or 4 was present prior to pharmacologic reversal of neuromuscular blockade (i.e., standard method) or whether an alternative method was used, such as 1) visually counting the number of evoked orbicularis oculi muscle responses to train-of-four stimulation of the facial nerve, or 2) observing the patient for clinical evidence of partial recovery (e.g., swallowing or attempts to breathe). After completing the PACU assessment of neuromuscular function, we reviewed the anesthesia records and recorded relevant intraoperative anesthetic variables to identify other possible factors associated with residual blockade (Table 1).

Results are expressed as mean values ($\pm$ SD). Differences between groups were identified using an unpaired Student's t-test. Fisher's exact test was used to compare nonparametric data. Statistical significance was defined by $p < 0.05$.

Results

We evaluated 38 ASA physical status II and III adult patients who were administered isoflurane ($n=33$) or enflurane ($n=5$) anesthesia for carotid endarterectomy ($n=22$) or

thoracotomy ($n=16$). Five of the 38 patients (13.2%) had evidence of residual blockade in the PACU. Two of 18 patients who received vecuronium (11.1%), three of 14 patients who received pancuronium (21.4%), and none of six patients who received both vecuronium and pancuronium had residual blockade (NS). Four of the five patients with residual blockade had train-of-four ratios <0.70 and were unable to successfully perform three or more of the clinical tests of neuromuscular function. One patient had a train-of-four ratio of 0.81 but was unable to perform any of the clinical tests of neuromuscular function and had shortness of breath and upper airway obstruction. This patient's ability to perform the clinical tests of neuromuscular function markedly improved, and the symptoms of respiratory distress were resolved within 2 minutes following administration of edrophonium 80 mg iv and atropine 1.2 mg iv.

Of the four patients with train-of-four ratios less than 0.70, three were given an additional dose of edrophonium 0.5-1.0 mg/kg iv and atropine 0.02-0.03 mg/kg iv. In one of these patients (train-of-four ratio of 0.66), clinical recovery of neuromuscular function was rapid, and the train-of-four ratio exceeded 0.70 within 3 minutes. In two patients (train-of-four ratios <0.33), the clinical responses to edrophonium and atropine were minimal, and the train-of-four ratios remained relatively unchanged. Both of these patients had respiratory distress (i.e., shortness of breath, upper airway obstruction); one patient required bag-mask ventilation with 100% oxygen and a nasopharyngeal airway, and the other patient was reintubated and ventilated. The patient who was not given an additional dose of edrophonium and atropine (train-of-four ratio of 0.52) had no symptoms of respiratory distress or difficulty maintaining a patent airway.

Anesthesia personnel's observations near the completion of anesthesia revealed that the standard method of determining a thumb train-of-four count of 3 or 4 prior to pharmacologic reversal of neuromuscular blockade was used in 16 pa-

Table 1

Relationship between the method used to determine the degree of neuromuscular blockade prior to pharmacologic reversal in the operating room and the incidence of residual blockade in the PACU

Method of monitoring	Residual blockade (n=5)	No residual blockade (n=33)
Alternative method†,§	5	17
Train-of-four count of 3 to 4	0	16

* The method used to assess the degree of neuromuscular blockade prior to pharmacologic reversal was assigned to one of two groups: a thumb train-of-four count of 3 or 4 (n=16) or an alternative method (n=22). Comparison of the data between these two groups were made using Fisher's exact test.

† Alternative methods included 1) visually counting the number of evoked orbicularis oculi muscle twitches elicited by supramaximal train-of-four stimulation of the facial nerve, or 2) observing the patient for clinical evidence of partial recovery (e.g., swallowing or attempts to breathe).

§ $p < 0.05$ (The use of an alternative method to assess the degree of neuromuscular blockade prior to pharmacologic reversal was associated with residual blockade in the recovery room significantly more frequently than when a thumb train-of-four count of 3 or 4 was used.)

tients. One of the aforementioned alternative methods was used in 22 patients (Table 1). Five of the 22 patients (23%) had evidence for residual blockade in the PACU; two patients were monitored by visual observation of the number of orbicularis oculi muscle twitches elicited by train-of-four stimulation of the facial nerve, and three patients were monitored by observation for clinical evidence of partial recovery from nondepolarizing neuromuscular blockade (e.g., swallowing or attempts to breathe). In contrast, none of the 16 patients who had a thumb train-of-four count of 3 or 4 prior to pharmacologic reversal of neuromuscular blockade had evidence of residual blockade in the PACU ($p < 0.05$).

Review of the anesthesia records revealed that the time from the last dose of muscle relaxant administered to the patient until reversal of neuromuscular blockade was significantly less in patients who had evidence of residual blockade in the PACU compared with patients who did not (Table 2). None of the other intraoperative anesthetic variables were significantly associated with the occurrence of residual blockade. Neostigmine 0.04-0.06 mg/kg iv and glycopyrrolate 0.1-0.15 mg/kg iv were given to all patients upon completion

of the surgical procedure in an attempt to reverse neuromuscular blockade.

Discussion

Residual blockade occurred in 13.2% of the patients studied. The incidence of residual blockade was not significantly different in patients receiving vecuronium (11.1%) or pancuronium (21.4%). This lack of statistical significance, however, may be attributable to sample size, as the incidence of residual blockade in this study was similar to previously reported observations for vecuronium and pancuronium.³ The design of the present study initially called for evaluation of 50 consecutive patients. However, individual anesthesiologists and other anesthesia personnel became aware of the postanesthetic evaluation of their patients. Therefore, we terminated the study after 38 patients to preserve the blinded and randomized clinical management of intraoperative neuromuscular blockade, possibly at the expense of some statistical power.

We obtained the data in this study from patients in the clinical setting. Thus, the choice and dosage of drugs used for premedication, anesthesia, and neuromuscular blockade and its reversal, and the method used to

assess the degree of neuromuscular blockade prior to pharmacologic reversal, were at the discretion of the anesthesiologist. This design was crucial for making observations that would accurately reflect clinical anesthesia and for maintaining the blinded randomization of the methods used to assess the depth of neuromuscular blockade intraoperatively. The method of intraoperative neuromuscular blockade monitoring has not previously been evaluated as a factor in the occurrence of residual postoperative blockade. In this study, we found that for situations in which a thumb train-of-four count of 3 or 4 could not be determined because of surgical positioning requirements, anesthesiologists estimated the degree of nondepolarizing neuromuscular blockade prior to pharmacologic reversal using alternative methods such as counting the number of evoked orbicularis oculi muscle responses to train-of-four stimulation of the facial nerve, or observing the patient for clinical evidence of partial recovery (e.g., swallowing or attempts to breathe). However, the orbicularis oculi muscle has been demonstrated to be more resistant than the adductor pollicis muscle to neuromuscular blockade with both intermediate-duration and long-duration muscle relaxants,^{11,12} and clinical signs of partial recovery of neuromuscular function are unreliable indicators of the degree of nondepolarizing neuromuscular blockade.^{1,2,13,14} Both of these methods may result in underestimation of the degree of neuromuscular blockade at the time of reversal, thus making its reversal more difficult.⁵⁻⁸ The results of this study are consistent with this assertion. Of the 22 patients in whom one of these alternative methods was used, five had evidence of residual blockade in the PACU. In contrast, none of the 16 patients with a thumb train-of-four count of 3 or 4 prior to pharmacologic reversal of neuromuscular blockade had evidence of residual blockade in the PACU ($p < 0.05$).

The time from the last dose of muscle relaxant until antagonism of neuromuscular blockade was significantly shorter in patients with resid-

Table 2

*Relationship between intraoperative anesthetic variables and residual blockade in the recovery room**

Intraoperative anesthetic variable	Residual blockade (n=5)	No residual blockade (n=27)
Total dose (mg/kg/hr)†	0.09 ± 0.01	0.08 ± 0.02
Duration of blockade (min)	175.0 ± 57.4	165.9 ± 65.5
Number of doses	4.0 ± 1.6	3.4 ± 1.6
Time from last dose of muscle relaxant until antagonism of blockade (min)	31.0 ± 16.4§	55.2 ± 23.7
Time from antagonism of blockade until evaluation of neuromuscular function in the recovery room (min)	27.0 ± 5.7	30.2 ± 9.7
Amount of last dose of muscle relaxant (mg/kg)†	0.052 ± 0.02	0.038 ± 0.03

* The six patients who received both vecuronium and pancuronium were excluded from analysis.

† Corrected for the potency (ED_{95}) of the muscle relaxant.¹⁰

§ $p < 0.05$ (significantly less compared with patients without evidence for residual neuromuscular blockade).

ual blockade when compared with patients without residual blockade (31.0 ± 16.4 minutes vs. 55.2 ± 23.7 minutes, $p < 0.05$). This result is not unexpected since the time required to reverse a nondepolarizing neuromuscular block depends on the intensity of blockade at the time of reversal.¹⁵ Patients who receive a dose of muscle relaxant near the end of the case may have a more profound level of blockade, and pharmacologic reversal of neuromuscular blockade may be prolonged.

Conclusion

In conclusion, this study demonstrates that clinically significant residual blockade in the PACU may be a problem in patients who receive intermediate-duration or long-duration nondepolarizing muscle relaxants. More important, methods other than determining a thumb train-of-four count of 3 or 4 prior to pharmacologic reversal of neuromuscular blockade may lead to a relative overdose of muscle relaxants, and subsequently, delayed recovery of muscle strength

postoperatively. This is reflected by the finding that the time from the last dose of muscle relaxant until antagonism of neuromuscular blockade plays a significant role in the occurrence of residual blockade. We hypothesized that the use of a peripheral nerve stimulator to determine a thumb train-of-four count of 3 or 4 prior to pharmacologic reversal of nondepolarizing neuromuscular blockade would ensure adequate reversal and, thus, would reduce the incidence of residual blockade in the PACU. Under the clinical context of this study, the results support this hypothesis. The authors suggest that diligent and appropriate use of a peripheral nerve stimulator intraoperatively to monitor neuromuscular function and to determine a thumb train-of-four count of 3 or 4 before pharmacologic reversal of neuromuscular blockade is a key factor in preventing residual blockade in patients who receive intermediate-duration or long-duration nondepolarizing muscle relaxants. MM

REFERENCES

1. Viby-Mogensen J, Jorgensen BC, Ording H. Residual curarization in the recovery room. *Anesthesiology* 1979;50:539-41.
2. Beemer GH, Rozental P. Postoperative neuromuscular function. *Anaesth Intensive Care* 1986;14:41-5.
3. Bevan DR, Smith CE, Donati F. Postoperative neuromuscular blockade: a comparison between atracurium, vecuronium and pancuronium. *Anesthesiology* 1988;69:272-6.
4. Ali NH, Utting JE, Cray C. Stimulus frequency in the detection of neuromuscular blockade in humans. *Br J Anaesth* 1970;42:967-77.
5. Rupp SM, McChristian JW, Miller RD, Taboada JA, Cronnelly R. Neostigmine and edrophonium antagonism of varying intensity neuromuscular blockade induced by atracurium, pancuronium, or vecuronium. *Anesthesiology* 1986;64:711-7.
6. Gencarelli PJ, Miller RD. Antagonism of ORG NC45 (vecuronium) and pancuronium neuromuscular blockade by neostigmine. *Br J Anaesth* 1982;54:53-6.
7. Katz RL. Clinical neuromuscular pharmacology of pancuronium. *Anesthesiology* 1971;34:550-6.
8. Miller RD. Antagonism of neuromuscular blockade. *Anesthesiology* 1976;44:318-29.
9. Lee C-M. Train-of-4 quantitation of competitive neuromuscular block. *Anesth Analg* 1975;54:649-53.
10. Shanks CA. Pharmacokinetics of the nondepolarizing neuromuscular relaxants applied to calculation of bolus and infusion dosage regimens. *Anesthesiology* 1986; 64:72-86.
11. Caffrey RR, Warren ML, Becker KE Jr. Neuromuscular blockade monitoring comparing the orbicularis oculi and adductor pollicis muscles. *Anesthesiology* 1986;65:95-7.
12. Stiffel P, Hameroff SR, Blitt CD, Cork RC. Variability in assessment of neuromuscular blockade. *Anesthesiology* 1980; 52:436-7.
13. Miller RD. How should residual neuromuscular blockade be detected? *Anesthesiology* 1989;70:379-80.
14. Ali HH, Savarese JJ. Monitoring of neuromuscular function. *Anesthesiology* 1976;45:216-49.
15. Kopman AF. Recovery times following edrophonium and neostigmine reversal of pancuronium, atracurium, and vecuronium steady-state infusions. *Anesthesiology* 1986;65:572-8.

Exertional Compartment Syndrome in Covert Mild Hemophilia

A Case Report

Chris P. Tountas, M.D., Frederick O. Ferris, M.D., and Stephen W. Cobb, B.A.

ABSTRACT

A 37-year-old white male experienced unexpected postoperative bleeding after fasciotomy and decompression for left pronator and compartment syndromes of the forearm. He was subsequently diagnosed with a mild form of hemophilia A. One year later, surgery was required for right pronator and compartment syndromes. Pre- and postoperative cryoprecipitate infusions controlled bleeding following the second operation until the patient discontinued his infusions, resulting in a wound hematoma. Covert mild hemophilia is implicated in the pathogenesis of his compartment syndromes.

Exertional compartment syndromes have been well documented in the lower extremity;^{1,2} however, only a few documented cases exist for the upper extremity.³⁻⁵ Although the pathophysiology of compartment syndromes is somewhat unclear, it is generally accepted that raised intracompartmental pressure, due either to an increase in intracompartmental volume or a decrease in its size, causes a reduced vascular exchange, resulting in tissue ischemia and necrosis.⁶ Clinical signs of compartment syndrome in the forearm include pain with passive extension of the fingers and paresthesia. Elevated intracompartmental pressures confirm the clinical diagnosis. Causes include intensive use of the muscles and hemophilia.

Hemophilia is an X-linked recessive disorder that results in decreased levels of functional factor VIII, part of the intrinsic coagulation system. Most hemophiliacs are, therefore, male, while carriers are female. An estimated one in 10,000 newborn males has hemophilia A. The disease also has a relatively high incidence of sporadic occurrence with no antecedent family history.⁷ Clinically, hemophiliacs bleed into deep soft tissues, muscles, joints, and body cavities usually hours after trauma or surgery. The disease can be due to any one of several mutations within the factor VIII gene, which results in varying levels of deficiency. Severe hemophiliacs have less than 1% normal factor VIII and bleed spontaneously, while moderate hemophiliacs have 1% to 5% of normal factor VIII and bleed less often. Mild disease is seen with 6% to 40% factor VIII levels; these patients only bleed with trauma or surgery, and their hemophilia may go undetected for years.

Case Report

A 37-year-old, right-hand dominant, white male machinist was seen with a five-month history of bilateral forearm and hand swelling and pain. He also noticed periodic numbness and diminished strength in the left hand. The patient had been treated surgically four years earlier for bilateral carpal tunnel syndrome and recovered. There were no postoperative complications, and he returned to work. He had no other remarkable medical history.

Upon the patient's examination on February 24, 1989, pertinent clinical findings were a negative Tinel's sign percussing median and ulnar nerves at the wrist, diminished strength in the flexor pollicis longus and the index flexor digitorum profundus, pain with resisted flexion of the ring and small fingers, and forearm discomfort after hyperpronation for two to three minutes. The patient's electromyography (EMG) also was positive for bilateral pronator syndrome. Pulses were normal. After exercise, both forearms increased 2 cm in diameter and felt very tense.

Under axillary block, the left median nerve and forearm fascia were decompressed from the elbow to the distal half of the forearm. Fascia overlying the anterior compartment was released. There was no sign of unusual bleeding during the procedure or after the tourniquet was released before closure. A few hours postoperatively, however, the patient reported significant swelling and pain in his left forearm. His dressings were noted to be completely soaked with fresh blood. Surgical exploration of the wound that evening revealed generalized oozing from the skin edges and muscle surface. After one small arterial bleeder at the distal end of the

wound was identified and ligated, slow oozing continued.

Two days postoperatively, the patient was still bleeding from the exposed muscle and skin edges of the surgical wound. Re-exploration revealed no arterial bleeding, but attempts at multiple cauterization of the oozing edges did not completely stop all bleeding. After hematology consultation, the patient was given 60 units of cryoprecipitate three days postoperatively, and then 15 units every 12 hours until his wound healed sufficiently, about 20 days postoperatively. This treatment effectively stopped all postoperative bleeding.

The patient denied using aspirin, antihistamines, or any anti-inflammatory drugs before admission; however, he did reveal a history of delayed severe bruising after seemingly minor injuries. Tests for coagulation disorders were normal except PTT and factor VIII activity. PTT was slightly elevated, 44.5 and 44.8 (normal 23-44), and the patient's factor VIII was as low as 35% (normal 75%-135%). After the initial infusion of cryoprecipitate, the patient's factor VIII rose to 158%, and postoperative infusions maintained the level at 63%. We reviewed the case with members of the University of Minnesota Coagulation Laboratory, who confirmed that the patient had a mild form of hemophilia A.

One year later, the patient was progressively symptomatic in the right forearm for pronator and compartment syndromes. His right forearm increased about 2 cm in diameter and 30 cc in volume after exercise. Right-hand strength was diminished. EMG was positive for pronator's syndrome on the right side. His at-rest right forearm volar compartment pressure, measured with an arterial transducer,⁸ was 30 mmHg and rose to 50 mmHg after a few minutes of exercise. We considered this an indication for surgery and performed decompression of the median nerve and fasciotomy under general anesthesia.

The patient received 30 units of cryoprecipitate preoperatively. After surgery, the wound was meticulously cauterized, a Jackson-Pratt drain was inserted, and the wound was closed. The patient was scheduled to

receive 15 units of cryoprecipitate every 12 hours postoperatively until the wounds healed. There was no bleeding until the patient discontinued his cryoprecipitate infusions against medical advice 13 days postoperatively. He subsequently developed a wound hematoma on his right forearm four days later. He then resumed the infusions and experienced no further complications. Two months later, he had recovered significant hand function and returned to work with minimal restrictions.

Discussion

Hemophiliacs are susceptible to peripheral neuropathies due to compression from either intraneural hemorrhaging or adjacent hematomas.⁹ In a study of 58 limbs with compartment pressure, one case was found to be a result of hemophilic hemorrhage into the volar compartment of the forearm.¹⁰ In a study of 206 hemophiliacs, peripheral neuropathies developed in 13.6%,¹¹ and another study discovered 4.0% of 200 hemophiliacs developed associated neuropathies in the forearm and wrist.¹² As a machinist, our patient worked with vibrating machines throughout the entire work day. Increased compartment pressure was noted after minimal exercise, and several evaluations showed very tense forearms, both clinically and with circumferential measurements. Hemophilic hemorrhage has also been identified as a cause of carpal tunnel syndrome,^{9,13-14} of which this patient had a history. It is probable that his working conditions, coupled with his mild hemophilia, caused significant elevation of compartment pressure and a compressed median nerve. Undetected mild hemophilia may lower the threshold for the development of chronic exertional compartment syndromes.

In mild hemophilia, activation of the sympathetic nervous system due to stress makes the patient's factor VIII initially extremely hyperactive, increasing its functional capacity.¹⁵ Factor VIII half-life is only six to 10 hours, however, and delayed bleeding occurs when the clotting factor supply is exhausted; thus, factor VIII activity drops precipitously. Such

wide fluctuations of activity were noted in this case. Many mild hemophiliacs have episodes of minor delayed bruising but are not diagnosed as hemophiliacs until early adulthood when some trauma or surgery seriously disrupts the hemostatic mechanism. Our patient's carpal tunnel surgeries probably did not result in postoperative bleeding since less vascularized tissue is manipulated and bruised than in the pronator release.

Our patient had no obvious history that would indicate a coagulopathy. When specifically questioned, however, he recalled incidences of delayed bruising after trauma. Although postoperative bleeding can be the first sign of mild hemophilia, the patient's bilateral carpal tunnel releases had no apparent hematologic complications, although he did experience excessive pain. His family history was negative for a coagulation disorder. Some authors have proposed a questionnaire designed to identify mild hemophilia, but even meticulous examination may be inadequate for clues preoperatively.¹⁶ A study of 120 patients with mild bleeding disorders could only diagnose 63 with a definite coagulopathy after using standard hemostatic screening tests.¹⁷ Although peripheral neuropathies are often indicators for blood tests to screen for metabolic diseases,^{18,19} like carpal tunnel syndrome in amyloidosis, mild hemophilia is not usually included.

Fortunately, most forms of mild hemophilia A are not life threatening if detected early after trauma or surgery.²⁰ Treatment preoperatively with cryoprecipitate, heated, highly purified factor VIII, or newer genetically engineered factor VIII will control bleeding until wound healing is complete. MM

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REFERENCES

1. Leach RE, Hammond G, Stryker WS. Anterior tibial compartment syndrome: acute and chronic. *J Bone Joint Surg [Am]* 1967;49:451-62.
2. Pedowitz RA, Hargens AR, Mubarak SJ, Gershuni DH. Modified criteria for the objective diagnosis of chronic compartment syndrome of the leg. *Am J Sports Med* 1990;18:35-40.
3. Pedowitz RA, Toutoungi FM. Chronic exertional compartment syndrome of the forearm flexor muscles. *J Hand Surg [Am]* 1988;13:694-6.
4. Imbriglia JE, Boland DM. An exercise-induced compartment syndrome of the dorsal forearm: a case report. *J Hand Surg [Am]* 1984;9:142-3.
5. Kutz JE, Singer R, Lindsay M. Chronic exertional compartment syndrome of the forearm: a case report. *J Hand Surg [Am]* 1985;10:302-4.
6. French EB, Price WH. Anterior tibial pain. *British Med J* 1962;2:1290-6.
7. Gitschier J. The molecular genetics of hemophilia A. In: Zimmerman TS, Ruggeri ZM, eds. *Coagulation and bleeding disorders: the role of factor VIII and von Willebrand*. New York: Marcel Dekker, Inc., 1989:23-40.
8. Matsen FA, Winkquist RA, Krugmire RB. Diagnosis and management of compartmental syndromes. *J Bone Joint Surg [Am]* 1980;62:286-91.
9. Case DB. An acute carpal tunnel syndrome in a hemophiliac. *Br J Clin Pract* 1967;21:254-5.
10. Mubarak SJ. Ischemia from fractures and injuries about the elbow. In: Morrey BF, ed. *The elbow and its disorders*. Philadelphia: W.B. Saunders Co., 1985:290-300.
11. Silverstein A. Neuropathy in hemophilia. *JAMA* 1964;190:554-5.
12. Lancourt JE, Gilbert MS, Posner MA. Management of bleeding and associated complications of hemophilia in the hand and forearm. *J Bone Joint Surg [Am]* 1977;59:451-9.
13. Moneim MS, Gribble TJ. Carpal tunnel syndrome in hemophilia. *J Hand Surg [Am]* 1984; 9:580-3.
14. Khunadorn N, Schlagenhauff RE, Tourbaf K, Papademetriou T. Carpal tunnel syndrome in hemophilia. *NY State J Med* 1977;77:1314-5.
15. Bergentz SE. The effects of trauma on haemostasis, coagulation and fibrinolysis. In: Renck K, ed. *Bleeding and thrombotic disorders in the surgical patient*. Norwalk, Conn: Appleton & Lange/Mediglobe, 1988:50-2.
16. Clark DP, Zurowski S. Mild hemophilia A as a cause of bleeding in dermatological surgery. *J Dermatol Surg Oncol* 1988;14:188-92.
17. Bolton-Maggs P, Wilkinson LS. Mild bleeding disorders: a review of 120 patients. *Clin Lab Haematol* 1984;6:247-56.
18. Chaplin E, Kasdan ML. Carpal tunnel syndrome and routine blood chemistries. *Plast Reconstr Surg* 1985;75:722-4.
19. Grokoe AW, Demartini FE. Systemic disease and the carpal tunnel syndrome. *JAMA* 1954;155:635.
20. Kjeldsberg C. *Practical diagnosis of hematologic disorders*. Chicago: American Society of Clinical Pathologists Press, 1989:577-90.



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SURVIVAL OF THE INDEPENDENT PRACTITIONER

I had the privilege of addressing a membership meeting of the Hennepin County Medical Society early last month in one of a series of seminars on "Survival Strategies for Physician Practices."

It was a good forum for the discussion of how business, physicians, and managed care organizations are dealing with changes in health care.

Physicians, and particularly independent practitioners, are being asked to recognize that changes are occurring more rapidly than they were only a few years ago, and that those changes are not being driven exclusively by the medical community. Practitioners are being asked to understand the increasing emphasis government and business are putting on managed care and on accountability for medical outcomes.

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Physician Liability for Failure to Remove Breast Implants

Keith J. Halleland, J.D.

Anyone who has picked up the newspaper the past few months has undoubtedly encountered an article regarding silicone gel breast implants. Not since the debate surrounding the Dalkon Shield IUD has a medical device or product received so much public attention. One of the most unusual things about the breast implant debate is that it has occurred before much litigation has reached the courtroom. In contrast, the heaviest publicity surrounding the Dalkon Shield occurred after many years of protracted litigation. One must wonder whether the publicity surrounding breast implants is driving the litigation, rather than the litigation driving the publicity.

The fact that there has been so much public attention regarding breast implants raises an important issue: what liability may there be for a physician who is advising patients regarding breast implant removal? That question is particularly important because intense publicity about the product is surely raising patient concern and potentially fostering additional litigation.

Theories of Liability

First, and most obvious, surgeons whose patients seek advice about breast implant removal are under an affirmative legal duty to warn of the device's risks. Some women will choose to avoid that risk by having the product removed. In general, any physician who fails to advise a woman of a newly discovered risk may face liability for future harm. That liability can arise under several theories.

In *Reinhardt v. Colton*,¹ the Minnesota Supreme Court recognized a physician's duty to warn patients of the risks associated with treatments

or procedures. To establish a prima facie case of failure to warn, a plaintiff must show:

1. a duty on the part of the physician to know of a risk or alternative treatment plan;

"Publicity about breast implants is potentially fostering litigation."

2. a duty to disclose the risk or alternative program, which may be established by showing that a reasonable person in the plaintiff's position would likely attach significance to that risk or alternative in deciding whether to consent to treatment and that the physician knew or should have known that the plaintiff would rely upon such information.

3. a breach of that duty;
4. that the undisclosed risk materialized into harm; and
5. damage.²

When a woman seeks advice on whether an implant should be removed, the physician has a clear duty to know of its risks and disclose those to the patient. Failure to do so may be a breach of that duty.

The typical case of negligent "non-disclosure" of a risk arises when a patient is asked to consent to treatment a physician believes is necessary. After the treatment takes place and a problem arises, the patient may argue that she would not have accepted the treatment if the risks associated with it had been disclosed to her. In evaluating whether the non-disclosure is the cause of the injury, courts must evaluate whether a "reasonable person in

the plaintiff's position would have refused the treatment" if given additional information.

In the case of breast implant removal, it may be fairly simple for the patient to establish this element of causation. For example, if, despite her physician's explanation of the risks, the patient keeps the implants and something goes wrong at a later date, she could claim that the physician did not fully inform her of the risks of non-removal and that she would not have kept the implants if she had been given complete and correct advice. Given this scenario, it is important for physicians who advise patients of the risks of keeping implants to fully disclose the risks and document the advice in patients' medical records.

At least two court holdings indicate that physicians may be held liable for failing to take action to remove a medical device once the patient has developed complications or the device has been withdrawn from the market because it is defective. In *Beyette v. Ortho Pharmaceutical Corp.*,³ the 6th Circuit Court considered a physician's role in failing to warn a patient of the risks of her IUD. The court held that the physician's failure to inform her of the increased risk of pelvic infection, and the failure to remove the IUD once she developed adverse symptoms, rose to the level of an "intervening and superseding" cause of the patient's injuries, precluding manufacturer liability and placing liability squarely in the physician's hands. In the second case, a California appellate court held that the physician had an affirmative duty to warn a patient with an IUD of its risks once the product was withdrawn from the market.⁴

In light of these cases, the physi-

cian should take steps, at least in limited circumstances, to warn patients of newly discovered risks and take appropriate action if necessary. If the physician unreasonably fails to take such steps, liability may follow.

Failure to Adhere to the Standard of Care

Generally, the standard of care to which physicians must adhere is the degree of skill and learning that is normally possessed and used by doctors in good standing in a similar practice and under similar circumstances. Plaintiffs can use various types of evidence to establish the standard of care. In the case of prescription drugs, for example, the manufacturers' recommendations can be used as evidence to establish the standard of care. In *Mulder v. Parke Davis and Co.*,⁵ the court ruled that to establish evidence of a prima-facie case of negligence against the physician for failure to follow the manufacturer's recommendations, the plaintiff must show that the manufacturer provided the following information:

1. the conditions under which the drug should be prescribed;
2. the disorders it is designed to relieve;
3. the precautionary measures that should be observed; and
4. warnings of the dangers inherent in its use.

Under the reasoning of the *Mulder* decision, the manufacturer's instructions must be explicit. If the instructions are ambiguous, there is no basis for finding that the doctor was negligent in failing to follow them.⁶

This same method of establishing a standard of care could be applied to silicone breast implant cases. Under existing device labeling requirements, the manufacturers must publish warnings that include information concerning the effects of use, the relative hazards, side effects, contraindications, and precautions that apply to the device.⁷

These warning labels are similar to prescription drug package inserts, which must include warnings about possible adverse effects.

One difference between the two is that the FDA must approve drug package inserts before marketing. Device manufacturers selling devices developed before 1976 do not have to obtain FDA pre-market approval for the product or its label.⁸ Silicone breast implants have been on the market since 1962.⁹

Currently, there is a good deal of controversy surrounding the manufacturers' statements concerning implant safety. Regardless of whether the implant warning labels have been clear and explicit in the past, the current information regarding product safety is less than clear. Consequently, it is unlikely that a court would find a physician liable for failing to follow a manufacturer's recommendations. At the same time, the confusing state of the record regarding implant safety may make it even more important for physicians to explain to patients the risks of keeping the device intact.

To date, the FDA has not recommended that most women with implanted devices have them removed. It does recommend, however, that ruptured implants be removed. At the very least, failure to follow this recommendation may be evidence of negligence in cases where physicians fail to advise women to remove ruptured implants.

Strict Liability in Tort and Breach of Warranty

The doctrine of strict liability in tort provides that sellers of defective or unreasonably dangerous products are liable for injuries caused by the products. This theory has not been applied to physicians as distributors or sellers of medical devices.

Patients have also sued hospitals and medical providers for breach of warranty for medical instruments that subsequently failed. In these cases, the issue generally turns on whether a sale existed independent of the professional medical services provided. Since women cannot receive breast implants without the surgical procedure, patients are not likely to make a breach of warranty claim against physicians.

Physician Defenses to Claims of Negligence

Several defenses may exist to claims against physicians for failing to remove silicone breast implants. These include the defenses that physicians are not responsible for patients' decisions once the patients are reasonably informed of a device's risks, that an FDA moratorium may provide evidence of negligence for device insertion but not removal, and that the statute of limitations applies to the case.

First, although physicians may clearly be liable for failing to warn of treatment risks, they are not typically liable for patient decisions once an adequate warning is given. To use this defense, physicians must stay informed of FDA and manufacturer recommendations concerning adverse reactions, warning signs, and rupture. As discussed earlier, the risks must be communicated to the patient if the physician feels the patient would attach significance to the information. Presumably, a woman seeking advice about implant removal would be interested in all information about possible harm the devices could bring.

Second, although plaintiffs may argue that the FDA moratorium on the device creates evidence of negligence for inserting the device, it is more difficult to use this evidence in cases concerning implant removal. The FDA has only said the devices should be removed when they are clinically diagnosed as ruptured. Until that time, physicians may maintain that all surgery carries risk and that the risk may outweigh the risk of the device's rupture.

Plaintiffs' ability to use the manufacturer or FDA statements to establish evidence of negligence against a physician is complicated by differences in the regulation of drugs and devices. FDA and manufacturer statements have only been recognized as evidence in cases involving prescription drugs. Although some plaintiffs have alleged that FDA statements concerning devices constitute evidence of negligence, there is no consensus in case law concerning the sufficiency of such evidence.

Finally, the statute of limitations

for medical malpractice actions in Minnesota is two years from the time the cause of action accrues.¹⁰ The cause of action accrues when treatment ceases.¹¹ Determining when

treatment ceases is an issue of material fact for a jury.

In cases where a woman seeks advice concerning removal of breast implants and does not have the de-

vice removed, the statute of limitations should begin to run on the date the physician advised the patient or, at the very latest, the date the woman made her decision to keep the implants. This date could be extended if the patient continued to seek medical advice or treatment from the same physician concerning her implants or other related medical conditions.

Summary

In cases where the failure to remove breast implants later results in injury, physicians may be exposed to liability if it can be shown that the woman would have removed the implants had she received more adequate or complete advice regarding the risks of keeping the implants in place. It is possible that courts may impose liability on physicians for failing to take affirmative steps to remove the implants under limited circumstances. In cases where adequate warnings are given, however, liability will rest only where causation can be shown. Proving causation is always fact-specific and will vary from case to case. In general, it must be established that the physician did not give complete advice and that if better advice had been given, the patient would have had the implants removed, preventing later injury.

Physicians have at least three potential defenses to negligence actions regarding the failure to remove breast implants. First, the physician may maintain that he or she warned the patient and that the patient chose to ignore the advice. Second, the physician may rely upon available FDA and manufacturer recommendations that support the physician's advice regarding removal. Finally, the statute of limitations may bar a claim if more than two years have elapsed since the date of treatment. **MM**

Keith Halleland is a shareholder in the law firm of Popham, Haik, Schnobrich & Kaufman, Ltd., Minneapolis, and is co-chair of that firm's Health Care Practice Group.

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Private Pensions

A Less Taxing Alternative

Barry L. Schalkle, J.D., C.P.A., and Kevin J. Dyrhaug, C.F.P.

In the mid-70s, Congress passed laws to encourage people to save money in qualified retirement plans by offering substantial tax advantages. Contributions were tax deductible, the plan assets grew tax deferred, and the accumulated assets were favorably taxed upon the plan participant's death. However, when retirement plan values began to build to unexpectedly high levels, Congress changed the rules to include a penalty for building up too large a plan and to eliminate the favorable tax treatment at the participant's death.

The myriad of rules and filing requirements for qualified retirement plans (not to mention anti-discrimination laws) have placed limitations on the amount of money you can contribute each year, the amount of assets you can take out when you retire, as well as the amount you can accumulate for heirs without incurring severe income, penalty, and estate taxes on those assets. As a result, you may not want to accumulate "too much" in a qualified plan.

With the triple-edged sword of taxation looming on the horizon, how do you plan for retirement without the government becoming your major benefactor? How do you receive more income during your lifetime while preserving an adequate amount for your family at your death? These conflicting objectives pose a real challenge.

Qualified Plan Only

Let's review how this potential problem was successfully solved in the case of Dr. Dow Jones Jr., age 45, who has qualified retirement plan assets totaling \$500,000 and is planning to contribute \$30,000 annually to his qualified plans until retirement at age 62. Assuming he continues the

maximum annual contributions of \$30,000 and achieves a 10 percent annual growth, much of his qualified retirement plan assets will be subject not only to income taxes but also to the 15 percent excess accumulation

"Safe alternatives
can supplement
qualified plans, and
they are not tax
shelters or
loopholes."

tax or "success tax" at his retirement.* In the May 1991 issue of *Minnesota Medicine* (page 35), we showed how up to 83 percent of qualified plan assets may be lost in income, estate, and success taxes upon the death of the doctor or the doctor's spouse, whichever occurs last.

Qualified and Investment Plans—An Alternative

One alternative to the qualified-plan-only scenario might be for Dr. Jones to contribute just \$15,000 to the qualified plan and receive the other \$15,000 as additional salary, which is deductible to the corporation. Dr. Jones will pay income tax on the

\$15,000 salary and invest the net after-tax amount of \$9,000 in a traditional investment strategy.

The two major disadvantages of this alternative are the loss of the tax deduction on the amount taken as salary and the tax-deferred growth the qualified plan assets enjoy. These disadvantages mean that less money will be working in the early years, resulting in a smaller nest egg later, at Dr. Jones's retirement.

The major advantage of this alternative is that, upon Dr. Jones's death, any untaxed capital gain is subject only to the estate tax. Two other advantages are that only the untaxed gain on the investments will be taxed when money is taken out, and the money will not be subject to the excess accumulation penalty.

The Qualified Plan and Private Pension Option

Some safe alternatives are available that can supplement qualified plans, and they are not tax shelters or loopholes. Although these creative alternatives meet government approval, don't expect Uncle Sam to tell you about them. The key is knowledge, planning, and implementation. Let's explore a strategy called the private pension plan. The private pension plan is an opportunity to help build retirement assets to supplement a qualified plan while avoiding most of the confiscatory taxes, discrimination, and reporting rules.

What exactly is a private pension plan? It's a systematic approach to providing tax-preferred retirement and wealth accumulation. The benefits of a private pension plan include:

- accumulation of tax-deferred assets;
- non-taxable income when distributed;

*We have assumed that all the assets discussed in this article are taxed at the marginal estate tax rate of 50 percent, and the retirement plan distributions are income taxed at the combined federal and state rate of 40 percent.

- access to substantial assets without a 10 percent penalty tax before age 59½;

- no income tax or success tax upon death;

- tax-deductible contributions to the corporation (these are taxable to the individual, however);

- pre- and post-retirement death benefits; and

- flexibility in planning the timing of retirement income.

The plan offers complete freedom of choice. You decide:

- who the plan participants will be and, therefore, who will receive the benefits (you may be the sole plan participant);

- when to become a participant;
- how much and when to contribute to the plan;

- when to make withdrawals—participants are not required to leave dollars in the plan until age 59½, nor are they required to take money out at age 70½.

The plan is easy to implement and administer; no IRS approval is required, trustees are not necessary, and there are no annual administration fees.

The private pension plan is funded by contributions to an investment-oriented life insurance contract that allows the plan participant to manage or direct the cash values into various investment options, including money market funds, guaranteed accounts, managed bonds, government securities, growth stocks, Standard & Poor's Index Funds, balanced portfolios, and international securities.

The amount of the insured death benefit is normally kept to the required minimum to meet the Internal Revenue Code definition of life insurance. This minimizes the mortality expenses and enhances the growth of cash values for retirement. Although the death benefit is secondary to the tax-deferred accumulation of cash for retirement, it may also reduce or remove the need for other life insurance, thereby saving premiums that are currently being paid for survivor income insurance.

The primary purpose of the private pension plan is to provide supplemental retirement income, but it

can also fulfill other personal objectives, including the following:

- self-completion of retirement benefits for family survivor income needs;

- estate creation and conservation;

- educational funding;

- income-tax-free death benefits; and

- low-interest emergency funds.

Let's look again at Dr. Jones and his private pension plan. Let's say, rather than contributing all \$30,000

“You may not want to accumulate ‘too much’ in a qualified plan.”

into the qualified plan, he contributes \$15,000 to the qualified plan and receives the other \$15,000 as additional salary, which, again, is deductible to the corporation. Dr. Jones will pay income tax on the \$15,000 of salary and invest the net after-tax amount of \$9,000 into the private pension plan contract until retirement at age 62. Let's assume he can earn an average annual return of 10 percent.

When Dr. Jones reaches age 62 and retires, his retirement strategy should be to:

1. Begin to distribute the qualified retirement plan assets to meet his and his spouse's living needs. If the plan assets are allowed to grow, as projected, even the *minimum* annual distributions will trigger the 15 percent success tax.

2. Withdraw the *maximum* amount possible from the qualified plan, without incurring the success tax, even though it is more than the Joneses' living needs.

3. Deplete the plan assets over their projected life expectancy to avoid the IRS taxing as much as 83 percent of the qualified plan assets at the death of Dr. Jones or his wife, whichever occurs last. To the extent the annual distributions exceed their

income needs, the Joneses could add the unneeded funds to their investment portfolio or begin making gifts to a family wealth replacement trust.

The first-year distribution from the qualified plan is \$275,000 pretax and \$166,000 after tax and will increase by about 4 percent per year. The annual income in year 10, or when Dr. Jones turns 72, would be \$400,000 pretax or about \$240,000 after tax. Under this scenario, the qualified plan distributions would last 20 years, or until Dr. Jones is 82 years old. When Dr. Jones reaches age 82, or sooner if they wish, the Joneses would elect to receive distributions from the private pension plan. If they wait until Dr. Jones is 82, they will receive \$318,000, net after tax, for 10 years. Because the private pension plan distribution is considered first as a return of investment principal and then as a loan against the remaining assets, it will pass to the Joneses free of income taxes.

Following are the advantages of this combined planning alternative:

- The Joneses will have security in knowing they have a steady income for the rest of their lives, first from the qualified plan and then from the private pension plan, without subjecting the qualified plan distributions to the 15 percent excess accumulation penalty or success tax.

- If the Joneses decide to begin distributions from the private pension plan while taking distributions from the qualified plan, they will not be subject to the excess distribution penalty or success tax. This gives them flexibility to give money to a family wealth replacement trust or directly to their children. This fulfills the first of the dual objectives stated earlier. The private pension plan distribution is an annual election that adds flexibility to their planning; the Joneses could choose to take no distributions for several years, which would allow larger distributions later and would preserve the higher death benefit should they die before the private pension plan is consumed.

- If the Joneses should die before they have consumed the private pension assets, their heirs would receive between \$160,000 and \$600,000 more (net after estate taxes) in death

Table

Net after-tax retirement cash flow

Age	50	61	62	76	80	84	88	90
Qualified plan only	0	0	166,000	287,000	335,000	318,000	318,000	318,000
Q.P. & investment plan	0	0	166,000	287,000	335,000	318,000	0	0
Q.P. & private pension	0	0	166,000	287,000	335,000	318,000	318,000	318,000

Net after-tax amount to heirs

Qualified plan only	425,000	1,011,000	999,000	942,000	892,000	760,000	493,000	374,000
Q.P. & investment plan	414,000	998,000	989,000	916,000	966,000	83,331	0	0
Q.P. & private pension	717,000	1,183,000	1,161,000	1,291,000	1,511,000	1,092,000	669,000	371,000

benefits than they would if the Joneses had continued under the qualified-plan-only alternative. This completes their dual objectives of providing themselves with lifetime income and preserving more of the retirement plan assets for their family at their deaths.

- The Joneses can decide when and how much to contribute to the plan.

The disadvantages are few but should not be disregarded. Just as in the case of any non tax-deferred investment portfolio, less of the money is being invested up front because of income taxes. However, the tax-deferred growth on the assets is still enjoyed. Additionally, it is important to avoid allowing the policy to lapse. This lapse would cause a recapture of the taxable gain (the total distributions less the amount invested) and inclusion in the taxable income calculation. If Dr. Jones or his spouse should live beyond age 91, they may forgo some income available under the qualified-plan-only scenario.

Under any of the three alternatives, the Joneses should first use their qualified plan assets, taking the maximum allowable distribution without triggering the 15 percent success tax until the plan is depleted. Following is a summary of the

Joneses' net after-tax cashflow and the net after-tax amount available to their heirs under each alternative. (Also see table.)

Summary

The results of the Joneses' coordinated retirement income and estate planning strategies are as follows:

1. The Joneses maximized their estate assets by converting an inefficient estate asset (the qualified retirement plan) into an efficient estate asset (the income-tax-free death benefit) without jeopardizing their current or future standard of living or the value passed on to their heirs. This allows them to satisfy their conflicting objectives.

2. They added flexibility to their future family gifting plans by providing themselves a secure income for the rest of their lives.

3. They fulfilled their desire to protect their family against government confiscation of retirement plan assets in the event they both die before using all their qualified retirement assets.

This private pension plan strategy is obviously not available to everyone, nor is it appropriate for everyone. This solution worked well for this client, but everyone's situation is unique. Before creating such a plan, it is important to review all the

factors in an individual's financial picture, including financial and retirement objectives and investment risk tolerance. Although this is an innovative idea that may solve a pension dilemma, it should not be used in place of qualified retirement plans but, rather, used in conjunction with such a plan. The private pension plan does not work with all insurance products or all insurance companies. Choosing the right company and product for each client requires care and expertise. **MM**

Barry L. Schalkle, J.D., C.P.A., is the financial planning officer for Resource Trust Company.

Kevin J. Dyrhaug is a certified financial planner and vice president of Resource Insurance Agency, a fully owned subsidiary of Resource Trust Company.

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Physician Involvement, Leadership Will Help Achieve Equality

Thomas A. Stolee, M.D.

Health problems facing American Indians are daunting, writes Joe Moriarity in this month's cover story (page 14). Infant mortality among American Indians is 26 percent higher than among other U.S. people, and American Indians have an average life expectancy four years less than the general U.S. population. In this month's Face to Face interview (page 7), Robert Blum, M.D., Ph.D., of the University of Minnesota, makes the point that young American Indians have high death rates from suicide and accidents, as well as feelings of hopelessness reflected in a variety of unhealthy practices. "Kids who feel crummy are doing crummy," says Blum in a recent *Saint Paul Pioneer Press* article.

Our self-image is our most important possession. Many of us have contributed to the erosion of this vital personal attribute in some people. We have a tendency to generalize about groups of people depending on their physical appearance, sex, national origin, profession, and form of worship. Many of us generalize about a race of people based on a small number of outliers, and yet we complain about people stereotyping doctors based on a few "bad apples."

Encouragingly, an array of notable American Indian leaders have created needed programs for Minnesota's Indian populations; four such leaders are featured in the cover story.

Among them is Kathy Annette, M.D., director of the Indian Health Service's Bemidji Area. Annette has a true knack for getting the job done and for utilizing the experience, abilities, and knowledge of others. The Bemidji Area of the Indian Health Service is in good hands.

Another outstanding leader is Gerald Hill, M.D., who directs the Center of American Indian and Mi-



"We are a vital part of the leadership necessary to realize equality."

nority Health at the University of Minnesota-Duluth. I take great provincial pride in this program, although I had nothing to do with its development. Under the leadership of Hill and Dean Ronald Franks, M.D., the program flourishes.

Although not an Indian herself, Diane Pittman, M.D., has also created innovative programs to help improve American Indian health. While working on the Leech Lake Reservation, she has, among other things, helped develop a successful program for teen health and parenting.

About half of all American Indians live in cities, where Indian health services are particularly needed. The efforts of the Minneapolis Indian Health Board, under the direction of Norine Smith, are truly exciting. Smith's research shows that "people-type" services, such as health screenings, well-child care, family planning, and nutritional counseling, are the most useful in improving the health of American Indian people.

Similar efforts directed at all disadvantaged people, not only minority groups, have emerged in other

inner-city areas. We owe a tremendous debt to the many Minnesota physicians who have given large amounts of time to help these programs achieve their goals.

However, it is not only as physicians that we can realize our goals in creating equal opportunities for all people. As physicians, we are fortunate to have superior educational backgrounds and the ability to be community leaders. It is my absolute conviction that, despite the points discussed above, minority groups need the support of the majority. We are a vital part of the leadership necessary to realize equality.

I am delighted that the MMA Committee on Minority Affairs has had its first meeting and that the MMA Auxiliary has organized a committee to study and respond to minority issues. I am gratified that we are becoming involved in areas other than our sometimes more parochial initiatives, important as they are.

Physicians are frequently—and too often justly—criticized for their lack of community involvement. Recently, I asked one of Minnesota's most respected business executives why physicians as a group frequently lack credibility and esteem. He replied that most physicians seldom involve themselves in their communities' non-medical affairs. He acknowledged that physicians work long hours, but pointed out that this is true of most successful people who are involved in community boards, schools, politics, and the like. I applaud the doctors who give their time and talents to help solve the many social problems besieging our country. If the rest of us similarly give of our time, our wisdom, and our leadership, we can create stronger, healthier communities, while improving our professional image. **MM**

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Breast Implants and Physician Liability

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REFERENCES

1. 337 N.W.2d 88 (Minn. 1983).
2. 337 N.W.2d 96 (Minn. 1983).
3. 823 F.2d 990 (6th Cir. 1987).
4. *Tresemmer v. Barke*, 86 Cal. App. 3d 656, 150 Cal. Rptr. 384 (1978).
5. 181 N.W.2d 882, 887 (Minn. 1970).
6. 181 N.W.2d 873-874 (Minn. 1970).
7. 21 C.F.R. § 801.109.
8. 21 U.S.C. § 360e(l).
9. Biggest Maker of Breast Implants Is Said to Be Abandoning Market. *New York Times* 1992 March 19.
10. Minn. Stat. §§ 541.01, 541.07(1).
11. *Grondahl v. Bulluck*, 318 N.W.2d 240 (Minn. 1982).

People and Places Making Medical News

People

Departing 'U' Hospital Director

Robert Dickler, director of the University of Minnesota Hospital since 1987, has left the position to become a vice president with the Association of American Medical Colleges in Washington, D.C. In the new position, he will help develop programs and policies related to patient care issues.

At the University Hospital, Dickler oversaw a \$300 million budget and 3,600 full-time employees. "I truly enjoyed the opportunities here and will keep in close touch because I know Minnesota will continue to evolve and test a lot of ideas in the future," he said in a *Minnesota Daily* article.

U of M Alumni Service Award

University of Minnesota alumni and medical school clinical professors Stuart Lane Arey and Malcolm McCannel received the university's Alumni Service Award June 5 at the medical school's commencement ceremonies.

Arey, a clinical professor emeritus of pediatrics, graduated from the university's medical school in 1931. He practiced family medicine and general pediatrics in the Twin Cities for more than 40 years following his internship at the former Minneapolis General Hospital and his residency at Children's Memorial Hospital in Chicago. In 1969, Arey served as president of the Minnesota Academy of Medicine.

McCannel, a clinical professor of ophthalmology, received a master's degree in ophthalmology from the university in 1946 and has practiced ophthalmology in Minneapolis since 1949. From 1961 to 1972, he served on various missions for the World Health

Organization's Project HOPE.

McCannel is recognized nationally for his work in intraocular lens implantation and cataract surgery.

Fairview Ridges Chief of Staff

Robert S. Lund, M.D., of Edina, has been named the new chief of staff at Fairview Ridges Hospital for 1992-93. Lund, a radiologist, is in practice with Suburban Radiologic Consultants and has been on the Fairview Ridges Hospital medical staff since the hospital opened in 1984. He is currently chief of Radiology.

Other officers elected are Jean Bieraugel, M.D., chief-elect, and Steven Y. Tsai, M.D., secretary-treasurer.

Children's Hospital Cardiology Director

Peter Hesslein, M.D., has been named the first full-time director of pediatric cardiology at Children's Hospital of St. Paul. His appointment consolidates a collaboration between Children's Hospital, the University of Minnesota, and a community-based cardiology practice group.

In the new structure, Children's Hospital works closely with the section of pediatric cardiology at the University of Minnesota and with Pediatric Cardiology Consultants to expand the hospital's cardiology program. Under Hesslein's direction, the hospital's cardiology department is increasing its surgical services, interventional catheterization procedures, and fetal cardiac ultrasound studies.

As program medical director, Hesslein is providing clinical care services and coordinating attending rounds and medical education for residents and interns. In addition, he will continue his work as associate professor of pediatrics at the University of Minnesota. His interest is in cardiac rhythm disorders.

Orthopaedic Society President

Richard D. Schmidt, M.D., of Edina, assumed the presidency of the Minnesota Orthopaedic Society in May. He practices at the Southdale and Burnsville locations of Orthopaedic Associates, Ltd.

Other newly elected officers include David Lewellen, M.D., Rochester, president-elect; James Larson, M.D., Edina, secretary; Doug Drake, M.D., Edina, Minnesota Medical Association liaison; Mark Carlson, M.D., Duluth, treasurer; James House, M.D., Minneapolis, member-at-large; and Stephen Koop, M.D., St. Paul, member-at-large.

Mercy Medical Staff Officers

New officers of Health One Mercy Hospital's medical staff are Ronald Rehmann, M.D., chief; David Brusven, M.D., chief-elect; Gunnar Erickson, M.D., treasurer; and James Rusin, M.D., secretary.

Rehmann has been a family physician at the Family Medicine Clinic, Coon Rapids, since 1980. He joined Mercy's medical staff in 1970 and that same year began a 10-year association with the Coon Rapids Clinic.

Brusven, a general surgeon at Mork Clinic, Anoka, will assume the position of medical staff chief in January 1994. He joined the Mercy medical staff in 1984.

MHIA Annual Recognition Award

Greg Jones, chemical health program director at Vinland National Center in Loretto, Minnesota, received the Minnesota Head Injury Association's 1992 Annual Recognition Award. He was honored for his "contribution to the body of knowledge about chemical dependency and brain injury and for his personal dedica-

tion to improving the quality of life of persons with brain injury," said Leah Ross, president of MHIA.

Jones was instrumental in designing innovative chemical health services at Vinland to meet the special needs of survivors of traumatic brain injury and people with cognitive disorders.

St. Paul-Ramsey Staff

Steven G. Novak has joined Ramsey HealthCare as vice president of development. Previously the communication coordinator for the Minnesota Museum of Art, Novak also serves part time as a Minnesota state senator. Novak will focus on developing financial resources for Ramsey.

Steven R. Caldwell is the new senior vice president and chief financial officer. He was most recently interim president, CEO, and CFO for the Franciscan Sisters Health Care, Inc., of Little Falls, Minnesota.

Gabrielle Lawrence, former internal medicine administrator, is the new director of ambulatory care. Lawrence will work with all clinics on the development of shared systems, services, and facility planning to support Ramsey's continuing growth in ambulatory care.

David J. Bergh, formerly a director at St. Paul-Ramsey, is now vice president of information services. Bergh joined Ramsey eight years ago as a senior accountant.

P l a c e s

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Abbott, Mayo Study tPA

Abbott Northwestern Hospital and Noran Neurological Clinic are jointly one of eight centers in the United States studying the safety of using the clot dissolver tPA on stroke patients. The drug is commonly used on heart patients to dissolve blood clots that cause heart attacks. "The expectation is that stroke patients will experience less neurological damage if they receive tPA during emergency treatment," said Richard Koller,

M.D., a neurologist and the study's principle investigator. "We now realize that a stroke is followed by a window of opportunity for three or four hours when the brain cells haven't died," said Koller. "With prompt and proper treatment, the severity of the stroke may be lessened or even reversed."

A recent Mayo study found that balloon angioplasty works faster in the emergency treatment of a heart attack than drug treatment with tPA. Researchers randomly assigned 99 patients who suffered heart attacks to treatment with either tPA or balloon angioplasty and followed the patients for six months. Balloon angioplasty cleared 84 percent of blockages within 110 minutes of when the decision was made to treat, compared with a 70 percent rate of opening with tPA in the same time frame. When researchers compared the amount of heart muscle saved with the cost of therapy, they found no substantial difference in cost between the two therapies.

Mayo Alters Waste Facility Plans

Mayo Medical Center has revised its medical waste management proposal further and expects to reduce the amount of waste currently incinerated by one-third. Mayo is now proposing to build one incinerator, instead of the two originally proposed, and has added to the proposal autoclaving (steam sterilization), a plastics recovery system, and active carbon injection. Autoclaving uses pressure to raise steam to a high temperature to sterilize medical waste. The plastics recovery unit then separates plastic, glass, and metal for recycling from the sterilized medical and general waste. Active carbon injection is a new pollution-control technology that filters impurities out of stack gases after incineration, creating cleaner air.

Park Nicollet Expands Burnsville Clinic

Park Nicollet Medical Center's Burnsville Clinic broke ground in

June for a new addition that will feature two additional floors of clinical and diagnostic space; an expanded parking lot, including a parking deck; direct driveway access off Nicollet Boulevard; and a larger entrance area with expanded retail services. The clinic will begin offering mental health services in April 1993 and podiatry in summer 1993.

Fairview Constructs New Building

Fairview Hospital and Healthcare Services began construction in June of a new medical office building in Savage to house a variety of health care services. Located at Glenhurst Avenue and the Highway 13 frontage road, the 10,000-square-foot building will cost \$1.25 million. Sundance Medical Clinic, Ltd., a primary care clinic providing family medicine, obstetrical care, general surgery, and occupational medicine, will move from its present Savage office on West 125th Street to the new facility. Additional space at the facility will allow physicians who specialize in other areas to see patients there.

S o c i o e c o n o m i c s

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MCHA Raises Premiums

Minnesota Commerce Commissioner Bert McKasy approved a 9 percent premium increase effective July 1 for the Minnesota Comprehensive Health Association, the state's health insurer of last resort. The association's board of directors had recommended an increase twice that size, but McKasy said 9 percent is reasonable for both the policyholders and MCHA.

The 1976 Legislature established MCHA to provide coverage for those who cannot obtain private insurance.

VAMC Links Free Care to Income

The Minneapolis Veterans Medical Center has decided to link eligibility for free care to income levels of veterans without service-related

disabilities. Those with annual incomes higher than \$18,844 if single (\$22,613 with one dependent) became ineligible for free care on June 18, and starting in mid-July, they will no longer receive free prescriptions. The decision could affect 400 Minnesota veterans, according to an article in the Minneapolis-based *Star Tribune*. The hospital is considering further lowering the income levels later this year.

The hospital will continue to provide care for veterans with service-related disabilities, even if their illness is not related to the disability. Steven Kleinglass, associate administrator of the hospital, said social workers will try to help those who lose eligibility to find care elsewhere. The majority of the hospital's patients are over 65 and are potentially eligible for Medicare.

Mayo and Eau Claire Clinic Discuss Merger

Mayo Clinic and Midelfort Clinic in Eau Claire, Wisconsin, are discussing a possible merger, according to spokespeople for both clinics. Mayo has long cooperated with the Midelfort Clinic, which has 90 physicians on staff at its main offices in Eau Claire and satellite clinics in Chippewa Falls, Cameron, Barron, and Chetek, all in Wisconsin. According to Mayo spokesperson Chris Gade, the talks have included additional health care options for the Chippewa Valley. As *Minnesota Medicine* went to press, details were confidential.

Blue Plus and Behavioral Care Network Create New Firm

Blue Plus and Behavioral Care Network announced in June that they have joined to deliver chemical dependency and mental health care services through a new health care management firm, called Behavioral Health Services, Inc. (BHS). The new firm will offer services to people covered by employer-sponsored health plans.

It will manage all clinic, employee assistance, utilization management, and quality assurance programs, and it will plan and market new managed behavioral health products and services.

Blue Plus will own 60 percent and Behavioral Care Network will own 40 percent of BHS, which has six clinics located in Minneapolis, Fridley, Plymouth, Eagan, Eden Prairie, and Brooklyn Center. Patients will be referred to Abbott Northwestern for inpatient care.

Medical Waste Plan Accepted

A consortium of 18 Twin Cities hospitals has agreed that microwaving and steam decontamination are environmentally and operationally acceptable alternatives to incineration for treating infectious and pathological waste.

The consortium, called Minnesota Healthcare Partners, had originally planned to build a regional incinerator to handle the hospitals' waste, but environmentalists and potential neighbor communities protested the plan. The consortium withdrew its proposal and met with environmentalists, local and state government officials, and community representatives to discuss alternatives. The group studied 10 different technologies proposed by 20 companies, and its final report recommends microwaving and steam decontamination, neither of which have any known significant environmental impact.

The hospitals will still use incinerators to dispose of pathological waste, which accounts for only about 3 percent of the hospitals' waste and can be handled by incinerators already operating in the state.

Health Coalition Completes Mission, Dissolves

The board of directors of the Minnesota Coalition on Health voted to dissolve the 12-year-old nonprofit corporation after a routine three-year review of its role in the health care debate. The coalition, consisting of employers,

labor unions, health insurers, HMOs, physicians, hospitals and other health care providers, consumers, and state officials, was formed in 1980 to conduct research and educate the public about health care costs and access.

"When the coalition was formed, Minnesota health care costs were above the national average. Today, on average, Minnesota employers pay \$600 below the national average for each employee," said Patricia Drury, the coalition's executive director, in a Minneapolis-based *Star Tribune* article.

Physicians Earned Average \$164,300 in 1990

U.S. physicians in active practice earned on average \$164,300 in 1990 before taxes, worked 59.1 hours per week, and took five weeks off, according to an American Medical Association report. In 1989, average income before taxes was \$155,800. The 1990 study included physicians who practice at least 20 hours per week; it did not include residents and doctors employed by the federal government.

Incomes varied according to specialty, with surgeons having the highest average at \$236,400, followed by radiologists at \$219,400, anesthesiologists at \$207,400, and obstetricians/gynecologists at \$207,300. General and family practitioners averaged \$102,700 and pediatricians averaged \$106,500. Overall, half of all physicians made less than \$130,000, and one-fourth of general and family practitioners earned less than \$65,000.

The AMA found large discrepancies between incomes of rural and urban physicians, with rural doctors averaging one-fifth less than urban doctors. The study also found that professional liability claims have dropped since 1985. In 1988, 5.8 percent of physicians had claims, compared with 8.5 percent in 1985.

Rates, Trends, Data**State C-Section Rate Decreases**

Minnesota's cesarean-section rate, one of the lowest in the country, was 17.6 percent of live deliveries in 1990, down almost 3 percent from 1989 and 7 percent from 1987, according to a national study released in May by the Public Citizen's Health Research Group, a consumer group based in Washington, D.C. Alaska and Wisconsin had lower rates than Minnesota—15.3 and 17.5 percent, respectively. The national rate of 22.7 percent was down from 23 percent in 1989, partially due to the realization that women who have c-sections can later have vaginal births.

The research group said c-section rates should average 12 to 14 percent nationally based on the recommendations of Edward Quilligan, M.D., dean of the school of medicine at the University of California, Irvine, and editor of the *American Journal of Obstetrics and Gynecology*. Cesarean sections add an average \$2,600 to each delivery, according to the Health Insurance Association of America.

Minnesota Hospitals Have Low Mortality Rates

Four Minnesota hospitals made a list of 59 hospitals nationwide with mortality rates for Medicare patients "significantly lower" than predicted based on age and condition of the patients. The list, prepared by the Health Care Financing Administration, included the University of Minnesota Hospital; the two Mayo Clinic-affiliated hospitals in Rochester, Methodist and Saint Marys; and St. Josephs Medical Center in Brainerd. No Minnesota facilities made the list of 102 hospitals with the worst mortality statistics. The report includes mortality rates for 30, 90, and 180 days after admission. The 180-day figures are used

to prevent hospitals from covering up death rates by sending patients home to die.

Innovations**Cancer-Attacking Chemical Discovered**

Researchers at the Scripps Research Institute and the University of California, San Diego, have synthesized a chemical that attacks cancerous tumors. The chemical molecule, called an enediyne, hits cancer tissue like a bombshell, said K. C. Nicolaou, lead author of the study, which was published in the May 22 issue of *Science*.

When it gets inside a cancer cell, the molecule is activated to produce a radical, which kills cancer by slicing its DNA into bits, but the chemical has little effect on normal cells, said Nicolaou. The scientists are unsure why the compound only attacks cancer cells.

Preliminary studies in mice show that the chemical causes a regression of solid tumors and seems to cure mice with leukemia. The researchers are starting animal testing, but it will be at least two years before the drug can be tested on humans, said Nicolaou.

Medical Research**U of M Study Identifies Breast Cancer Risk Factors**

Women with a family history of breast cancer have increased risk of developing the disease if they have an apple-shaped body (high waist-to-hip ratio), have had fewer than three live births, or were older than 30 when they first became pregnant, according to a University of Minnesota study published in the May 14 *New England Journal of Medicine*. The study, which surveyed 37,000 Iowa women, determined how different risk factors combine to increase a woman's chance of developing breast cancer.

The study offers information that may help geneticists in the

search for what causes breast cancer, said Thomas Sellers, assistant professor of epidemiology and one of the principal investigators. He said experts must now analyze whether a genetic link exists between weight distribution, fertility problems, and breast cancer. Preliminary data suggest that many of the women who had small families or started them late had fertility problems.

AIDS Update**Most Physicians Have Treated an HIV-Positive Patient**

More than four out of five physicians in the United States have treated at least one patient infected with the AIDS virus, according to a Gallup poll released by the American Medical Association. The AMA's periodic poll on health care issues showed that 82 percent of respondents had treated an HIV-positive patient, with a higher percentage of younger physicians having done so.

Ninety-four percent of physicians under age 35 said they had treated an HIV-positive patient, and 61 percent of those 65 or over had done so. Regionally, physicians in the North Central states were the least likely to have treated an HIV-positive patient (76 percent) and those in the Northeast were most likely (88 percent). Physicians in metropolitan counties were more likely (84 percent) than those in non-metropolitan areas (66 percent) to have treated an HIV-positive patient.

Eighty-one percent of physician respondents maintained that physicians have a right to know whether a patient is HIV-infected before offering treatment. A still higher figure—87 percent—believe that a physician who is HIV positive should either obtain a patient's informed consent or refrain from performing significant invasive procedures. Physicians split almost evenly on the necessity of testing all hospitalized patients.

MM

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A Calendar of Continuing Medical Education Courses

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JULY 1992

July 16-19 **Advances in Clinical Management of Infectious Disease** Hennepin County Medical Center; Hennepin County Medical Center, Minneapolis, MN. CONTACT: Robin Hoppenrath, 701 Park Avenue, MC 867A, Minneapolis, MN 55415-1829; 612/347-2075.

July 20-24 **Team Management of Diabetes Mellitus** International Diabetes Center; International Diabetes Center, Minneapolis, MN. CONTACT: Cindy Poppitz, International Diabetes Center, 5000 West 39th Street, Minneapolis, MN 55416; 612/927-3393.

AUGUST 1992

Aug. 3-7 **Team Management of Diabetes Mellitus** International Diabetes Center; International Diabetes Center, Minneapolis, MN. CONTACT: Cindy Poppitz, International Diabetes Center, 5000 West 39th Street, Minneapolis, MN 55416; 612/927-3393.

Aug. 8 **Prevention and Management of Osteoporosis** Office of Continuing Medical Education, University of Minnesota Medical School; Canterbury Inn, Shakopee, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Aug. 17-21 **Team Management of Diabetes Mellitus** International Diabetes Center; International Diabetes Center, Minneapolis, MN. CONTACT: Cindy Poppitz, International Diabetes Center, 5000 West 39th Street, Minneapolis, MN 55416; 612/927-3393.

Aug. 20-22 **Operative Gynecology: Third Annual Live Televideo Conference** Mayo Clinic/Mayo Foundation; Mayo Foundation, Rochester, MN. CONTACT: Postgraduate Courses, Mayo Clinic/Mayo Foundation, 200 1st Street SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

Aug. 31-Sept. 4 **Team Management of Diabetes Mellitus** International Diabetes Center; International Diabetes Center, Minneapolis, MN. CONTACT: Cindy Poppitz, International Diabetes Center, 5000 West 39th Street, Minneapolis, MN 55416; 612/927-3393.

SEPTEMBER 1992

Sept. 9-18 **Pain Management for the Primary Care Physician** Hennepin County Medical Center; Hennepin County Medical Center, Minneapolis, MN. CONTACT: Program Coordinator, 701 Park Avenue, Mail Code 867A, Minneapolis, MN 55415-1829; 612/347-2075.

Sept. 10-11 **Applied Clinical Research Methods** Hennepin County Medical Center; Hennepin County Medical Center, Minneapolis, MN. CONTACT: Ann Samways, 701 Park Avenue, Mail Code 867A, Minneapolis, MN 55415-1829; 612/347-2075.

Sept. 10-11 **Second Annual Children's Hospital of St. Paul Practical Pediatrics Course for the Primary Care Physician** Children's Hospital of St. Paul; United/Children's Conference Center, St. Paul, MN. CONTACT: Sue Hance, Health One Medical Education, 2810 57th Avenue North, Minneapolis, MN 55430; 612/574-7895 or 800/343-DOCS.

Sept. 10-11 **Hepatology Update 1992** Mayo Clinic/Mayo Foundation; Mayo Clinic, Rochester, MN. CONTACT: Rita Kunz or Jan Fleck, Mayo Clinic/Mayo Foundation, Postgraduate Courses, 200 1st Street SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

Sept. 11 **Adolescent Medicine for the Primary Care Practitioner** Minneapolis Children's Medical Center; Park Inn, Minneapolis, MN. CONTACT: Kathy Ingerson, Minneapolis Children's Medical Center, 2525 Chicago Avenue South, Minneapolis, MN 55404; 612/863-5884.

Sept. 11-12 **Lasers in Orthopedic Surgery** Laser Center of Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Laser Center 39102, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-3000.

Sept. 12-13 **University of Minnesota Weekend Update: Infectious Disease** Office of Continuing Medical Education, University of Minnesota Medical School; Canterbury Inn, Shakopee, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Sept. 18 **Thrombolytic Therapy in Acute MI** Abbott Northwestern Hospital; Minneapolis Heart Institute, Minneapolis, MN. CONTACT: Minneapolis Heart Institute Foundation, 920 East 28th Street, Minneapolis, MN 55407; 612/863-3979.

Sept. 18-19 **Advanced Laparoscopic Abdominal Surgery Seminar** Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

Sept. 18-20 **Annual Ambulance Medical Directors Retreat** Hennepin County Medical Center; Breezy Point Resort, Breezy Point, MN. CONTACT: Ann Samways, 701 Park Avenue, Mail Code 867A, Minneapolis, MN 55415-1829; 612/347-2075.

Sept. 19-23 **Radiology/92: Imaging & Intervention—1992 and Beyond** Office of Continuing Medical Education, University of Minnesota Medical School; Mayo Memorial Auditorium, University of Minnesota, Minneapolis, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Sept. 23 **Biofeedback of Colorectal Disorders** Office of Continuing Medical Education, University of Minnesota Medical School; Moos Tower, University of Minnesota, Minneapolis, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Sept. 23 **Endorectal Ultrasonography** Office of Continuing Medical Education, University of Minnesota Medical School; Midway Hospital, St. Paul, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Sept. 24-26 **Fourth International Vaginal Surgery Program** Hennepin County Medical Center; Ritz Carlton, St. Louis, MO. CONTACT: Ann Samways, 701 Park Avenue, Mail Code 867A, Minneapolis, MN 55415-1829; 612/347-2075.

Sept. 24-26 **Principles of Colon and Rectal Surgery** Office of Continuing Medical Education, University of Minnesota Medical School; Mayo Memorial Auditorium, University of Minnesota, Minneapolis, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Sept. 25-27 **Mechanical Ventilation: Principles and Practice** Office of Continuing Medical Education, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Sept. 26 **Minnesota Radiological Society Fall Meeting** Minnesota Radiological Society; Radisson Hotel, Rochester, MN. CONTACT: Allen V. Bergh, M.D., 69 West Exchange Street, St. Paul, MN 55102; 612/291-3183.

Sept. 29-Oct. 9 **Canada/New England Air/Sea Cruise** North Central Medical Conference; Canada and New England. CONTACT: North Central Medical Conference, 1845 Hampshire Avenue, Suite 200, St. Paul, MN 55116; 612/698-1888.

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United/Children's Conference Ctr., St. Paul

October 2 & 3

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Minnesota Epilepsy Group PA
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October 9

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October 19 & 20

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| October 9 | Health Care Access: A Matter of Justice, St. Paul |
| October 16 | Anxiety: The Interface Between Biology & Behavior, Minneapolis |
| October 29-30 | Trauma Management for Primary Care Providers, St. Paul |
| November 12-14 | Strategies in Primary Care Medicine, St. Paul |
| November 20 | Ramsey Research Conference, St. Paul |
| December 3-5 | Cardiopulmonary Medicine, St. Paul |

1993

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| February 19 | Burn Care Today, St. Paul |
| March 11-12 | Family Medicine Today, St. Paul |
| March 19 | Occupational Medicine Update, Minneapolis |
| March 25-26 | Critical Care 1993: Practical Approaches & Case Discussions, St. Paul |
| April 1-2 | Ob/Gyn Update, St. Paul |
| April 2 | ENT Update for Primary Care Physicians, St. Paul |
| April 16 | Domestic Violence: Physicians' Role Toward Solutions, St. Paul |

Information and Registration:

Continuing Medical Education, St. Paul-Ramsey Medical Center,
640 Jackson Street, St. Paul, MN 55101; Phone 612/221-3992

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Mankato: FP partner to join four board-certified family physicians, ages 34-43, in fast-growing, full-range practice. ob optional. Population 40,000+. Seventy miles to Twin Cities. Four colleges nearby. Subspecialty consultation readily available on hospital staff. Academic appointment available. Call: Tony Giefer, M.D., 507/387-8231. (8/91-R)

Family Physicians: Well-established south suburban Minneapolis family practice group seeks associates part/full time to staff day clinic. Excellent call schedule, salary, and fringe benefits. Also seeking locum tenens to staff PT/FT Urgent Care Centers and/or day clinic. Contact: Administration, Family Physicians, P.A., 612/435-4125, or send inquiries to Suite 100, 14050 Nicollet Avenue South, Burnsville, MN 55337. (*9/89-R)

Mankato Clinic, Ltd. is seeking BC/BE physicians in the following specialties: invasive cardiology, oncology/hematology, pulmonary medicine, general surgery, gastroenterology, family practice, and general internal medicine. The Mankato Clinic is a 53-physician multispecialty group

practice in south-central Minnesota with a trade-area population of +250,000. Guaranteed salary first year, incentive thereafter with full range of benefits and liberal time off. For more information call: Dr. B. C. McGregor, President, or Roger Greenwald, Executive Vice President, 507/625-1811 or write: 501 Holly Lane, Mankato, MN 56001. (12/91-R)

BC/BE Internal Medicine and Ob/Gyn Physician: Excellent opportunity to join well-established, progressive, 26-physician multispecialty group located in an economically sound community of 20,000 (drawing area of 40,000), 65 miles south of the Twin Cities. Full membership after one year. Competitive salary and fringe benefits package. Contact: Craig Oien, M.D., or Terry Tone, Administrator, 134 Southview, Owatonna, MN 55060; 507/451-1120. (7/92-R)

Forest Lake Doctor's Clinic is seeking a BC/BE family physician, pediatrician, ob/gyn, and internist to join 10-physician multispecialty group. Located 25 miles north of Minneapolis-St. Paul in progressive community with excellent schools, many beautiful lakes, recreational activities, golf, fishing, boating, skiing. Local hospital directly across street. Contact: Dr. Harvey J. Frank or Dr. Doug Sill, 121 SE 11th Avenue, Forest Lake, MN 55025; 612/464-7100. (4/90-R)

MDsearch assists medical groups and hospitals in their recruiting efforts. For confidential information on opportunities in the Upper Midwest, send CV and/or call collect: Mary Jo Cordes, MDsearch, PO Box 21507, St. Paul, MN 55121; 612/454-7291. (12/91-R)

Lake City, Minnesota: Family physician BC/BE needed to join three other FPs in progressive, growing practice on Lake Pepin/Mississippi River in southeastern Minnesota. Excellent first-year salary/benefits in a scenic community with multiple recreational opportunities. Contact: D.D. Pflaum, M.D., 303 South Washington, Lake City, MN; 612/345-3318. (8/90-R)

Olmsted Medical Group is seeking BC/BE physicians in the following specialties: orthopedics, radiology, family practice, emergency medicine, and ob/gyn. Great opportunity for well-trained physicians to join a 55+ physician multispecialty group in a dynamic, progressive practice. In addition to the main office in Rochester, the group operates eight branch offices in southeastern Minnesota. Excellent salary/benefits package includes malpractice insurance, flexible benefits plan, 401(k) and profit sharing, and relocation assistance. Send CV to: Olmsted Medical Group, Attn: Susan Schuett, 210 Ninth Street SE, Rochester, MN 55904. (1/92-R)

ST. CLOUD CLINIC

GENERAL INTERNIST

Opportunity available in a growing physician clinic of specialists and subspecialties of internal medicine in St. Cloud, Minnesota. Community has three colleges, excellent school system, and abundant recreational activities. Family living conditions are excellent! The St. Cloud Clinic is located in a new facility with access to the latest medical technological developments.

For more information about this position, please contact:

Scott Davis, M.D., or
Mark Murphy, Administrator
1200 Sixth Avenue North
St. Cloud, MN 56303

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With a commitment to excellence and a focus on the total needs of each patient, Oxboro Clinics blend a 'primary' approach with major centers of excellence in a broad range of specialty care.

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Jennifer J. Mitchell
Fairview Clinic Services
600 West 98th Street, Suite 390
Bloomington, MN 55420
(612) 885-6224 or toll free 1-800-842-6469

Downtown Office Space for Rent: Physician in the Medical Arts Building, 825, wishes to sublet to another physician on a part-time basis for the purpose of sharing overhead expenses. Call: 612/370-0553. (6/90-R)

Wisconsin: 120-physician multispecialty clinic in the Fox River Valley of northeastern Wisconsin desires two BC/BE pediatricians to join department of 15 BC/BE pediatricians. Excellent compensation and benefits package, leading to shareholder status after two years. The community offers a superb recreational, cultural, and family environment in which to practice. For information please call or write: Howard Kidd, M.D., La Salle Clinic, 411 Lincoln Street, Neenah, WI 54956; 414/727-4276. (3/91-R)

Family Physician wanted to join three board-certified M.D.s in well-established, expanding group practice. Weekend ER coverage. No buy-in. Financial package hard to beat. Enjoy a progressive, rural city within easy reach of St. Cloud and Minneapolis. Contact: Dr. Jim Mohs, Melrose Clinic, 603 West Main Street, Melrose, MN 56352; office, 612/256-4228; home, 612/256-3488. (4/91-R)

Internal Medicine, Pediatrics, and Dermatology practice opportunities available at the Faribault Clinic. The Faribault Clinic is a multispecialty group practice of 19 physicians. Faribault is located 50 miles south of Minneapolis on I-35. For more information contact: Ray W. Wood, M.D., or Ken Smith, Administrator, 924 NE First Street, Faribault, MN 55021; 507/334-3921. (4/90-R)

Stillwater: Multispecialty group with emphasis on primary care seeking BC/BE family physician, pediatrician, and internist. Scenic location with excellent school system, supportive medical community with strong local hospital, competitive salary and benefits. Send CV to: Jon Pedersen, St. Croix Valley Clinic, 921 Greeley, Stillwater, MN 55082; 612/439-2215. (12/92-R)

North-Central Minnesota: Primary care BC/BE general practice internist and BC/BE family practice physician with ob interest to join well-established group of six family practitioners and general surgeon. Excellent compensation benefits surround family-oriented community lifestyle. Send inquiries or CV to Julayne Mayer, Director of Physician Recruitment, Tri-County Hospital, 415 North Jefferson, Wadena, MN 56482; 800/950-0314; fax: 218/631-9292. (6/92-R)

Pediatrician wanted to join group of five board-certified pediatricians in a well-established, progressive group practice. Located in Minneapolis, minutes away from Children's Medical Center. Small practice stressing patient care and preventive medicine. Contact: Gregg Savitt, M.D., 3145 Hennepin Avenue, Minneapolis, MN 55408. (9/91-R)

Family Physician wanted to join five-physician, two-P.A., two-site family practice group in St. Anthony and Shoreview. Ob available. Competitive salary, benefits package,

and call schedule. Contact: Gerald Pitzl, M.D., Silver Lake Clinic PA, 612/788-9251. (7/91-R)

Ideal Internal Medicine Practice: Excellent opportunity for BC/BE internist to establish a prosperous practice. Progressive 107-bed community hospital with a medical staff of 45 physicians and a service-area population of over 45,000. Vibrant Northern Michigan community with all summer and winter recreational activities. Salary guarantee of \$110,000 with excellent benefits. Send CV or contact: John Schon, Administrator, Dickinson County Hospitals, 400 Woodward Avenue, Iron Mountain, MI 49801; 800/323-8856. *1-7/92

Family Practice: Physicians seeking a BC/BE family practice physician for the Norway, Michigan, service area. The physician would have the option of joining one of the existing practices and/or setting up his/her own practice. Anderson Memorial Hospital is a part of Dickinson County Hospitals and has a service-area population of over 45,000. Contact: Dr. Paul Hayes's office, 906/563-9255, or Dr. William Gladstone's home, 906/563-8743. Anderson Memorial Hospital, Main Street, Norway, MI 49870; 906/563-9243. *1-7/92

Alexandria, Minnesota: Three-person internal medicine group desires to add a fourth partner. Send CV to J. E. McCrery, M.D., 1527 Broadway, Alexandria, MN 56308. 6-9/92

New '92 Cars, Minivans, and Trucks—Save \$\$: Pay only a few hundred dollars over actual dealer cost! All makes and models. Full factory warranty. Save money. Save time. Save aggravation. Dealership delivery. Call Tom Rush at Auto Direct, 612/342-2886. (*4/92-R)

Falls Medical Search Seeks Physicians for practice opportunities locally and nationally. To explore new practice options confidentially, send your CV or call: Pat Falls, Falls Medical Search, 34 Forest Dale Road, Minneapolis, MN 55410; 612/922-0207 or 800/383-8916. (*5/92-R)

Come in from the Cold—Family Practice, Crane, Texas: Here are four good reasons to move from Minnesota to Texas: January, February, March, and Texas has no state income tax. Enjoy city amenities without having to live there. Crane Memorial Hospital is looking for two family practitioners. Beautiful modern 28-bed hospital and office building. Small town, medically underserved area. Health care professional shortage area. Only 45 minutes from international airport. Only 30 minutes from interstate highway. Excellent schools. Warm, dry climate. Great recruitment package. Contact: Steve Goode, Administrator, Crane Memorial Hospital, 1310 South Alford Street, Crane, TX 79731. Phone 915/558-3555. *3-7/92

Internal Medicine, Family Practice, Urgent Care, OB/Gyn, and Academics: Positions in large metropolitan cities, urban and rural communities with a concentration in the Great Lakes area and Plains states. Whether you prefer a

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- ◆ Dermatology—Fergus Falls;
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- ◆ General Surgery—Litchfield, Mora;
- ◆ Family Practice—Arlington, Brainerd, Crosby, Eden Prairie, Litchfield, Minneapolis, Monticello, Mora, Mound, St. James, Springfield;
- ◆ Internal Medicine—Alexandria, Minneapolis, Mound;
- ◆ Otolaryngology—Minneapolis;
- ◆ Pediatrics—Alexandria, Brainerd, Mound.

Contact: Jerry Hess
(612) 863-4193 or 800-248-4921.

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GENERAL INTERNAL MEDICINE FACULTY POSITIONS

The General Internal Medicine Division at Hennepin County Medical Center has full-time faculty positions available for Internists interested in primary care medicine beginning on or about July 1, 1992.

Three enthusiastic board eligible/certified General Internists are being sought to deliver Primary Care services to traditional Hennepin County patients. As well, the physicians would participate in some resident-medical student teaching and other activities of an expanding General Medicine Division. Academic rank will be established at the University of Minnesota.

Competitive salary and excellent benefits package is offered through Hennepin Faculty Associates, an equal opportunity/affirmative action employer. Contact or send CV to Craig Garrett, MD, Department of Medicine, Hennepin County Medical Center, 701 Park Avenue South, Minneapolis, MN 55415; 612-347-2703.

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cosmopolitan lifestyle, a city surrounded by nature and the beauty of the four seasons, the peaceful rolling farm country, or perhaps life in historic villages—there is something for you. To discuss your practice preferences and these opportunities, please call our toll-free number, 800/243-4353, or send your CV to Strelcheck & Associates, Inc., 10624 North Port Washington Road, Mequon, WI 53092.

*3-7/92

Ohio—Wisconsin—Missouri: Attractive opportunities in metropolitan and scenic recreational areas. Locations near pristine lakes, white water rivers, and national forests. Others in college communities offering professional and Big 10 college sports, fine arts, and a broad spectrum of nationally renowned CME programs. Positions available: allergy, dermatology, neurosurgery, occupational medicine, oncology, orthopedics, psychiatry, rheumatology, and urology. To discuss your practice preferences and these opportunities, please call our toll-free number, 800/243-4353, or send your CV to Strelcheck & Associates, Inc., 10624 North Port Washington Road, Mequon, WI 53092.

*3-7/92

Urgent Care: FT or PT opportunities available in busy, well-established Cedar Rapids urgent-care center. Occupational medicine including pre-employment evaluations and work-related injury treatment are also part of the practice. X-ray, laboratory, and physical therapy services available within clinic. Cedar Rapids, population 110,000, is located in

eastern Iowa and is 30 minutes from the University of Iowa. Excellent compensation and scheduled hours. Mail CV or call Bob Waste, Mercy Care Management, PO Box 786, Cedar Rapids, Iowa 52406; 319/398-6460. 3-7/92

General Surgeon: Five-man family practice group seeks surgeon. Only clinic in city of 8,000, one hour from Minneapolis. Position should generate adequate salary and lots of family time. Please contact James W. Dey, M.D., or Ruth Hawker, Clinic Manager, 501 North State Street, Waseca, MN 56093; 507/835-3110. (5/92-R)

One or Two Family Practice Physicians to join five family practitioners. Population 8,000. One hour south of Burnsville Center. Lakes, industry, negotiable salary. Clinic adjacent to hospital. Ample free time to enjoy family life. Contact James W. Dey, M.D., or Ruth Hawker, Clinic Manager, 501 North State Street, Waseca, MN 56093; 507/835-3110. (5/92-R)

Well-Established Family Practice available in rural northern Minnesota. As busy as you choose to be. Dispensary, small lab, and X-ray in office. New 80-bed regional hospital, well equipped, additional expansion in planning stage. Specialty consultants available. Near Boundary Waters Canoe Area, skiing, fishing, hunting, and clean air. New K-12 school with achievement scores above state and national average. State university, two community colleges, and vo-tech nearby. Write Gordon W. Franklin, M.D., Box 1 South Route,

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Veterans Affairs Medical Center, St. Cloud, Minnesota, is a 600-bed Medical Center providing acute psychiatric, intermediate medicine, and long term care to veterans.

We have full or part-time opportunities for several physicians to cover the off-shift hours.

Responsibilities include: unscheduled admissions, medical rounds, and emergency response.

Our focus is a flexible schedule to meet the mutual needs of staff and Medical Center.

Call or Write to explore these unique opportunities.

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St. Paul-Ramsey Medical Center Ramsey Clinic

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as Chief of the Department of Surgery, July 1, 1992

Dr. John A. Weigel is nationally known in the field of surgical trauma. He has been Medical Director of the Trauma Department at Parkland Memorial Hospital in Dallas, Texas, and Director of the Surgical Critical Care and Trauma Surgery Fellowship at The University of Texas Southwestern Medical Center at Dallas. He was born in Chicago and received his medical doctorate at the Medical College of Wisconsin.

Dr. Weigel's interests include trauma, surgical critical care and management of surgical infections including diabetic foot infections. To contact Dr. Weigel for consultation or referral, please call 1-800-328-1571

RAMSEY

Northome, MN 56661; or call: 218/897-5222 or 218/897-5272 evenings. (5/92-R)

Redwood Falls, Minnesota—Family Physicians: Four family physicians, one general surgeon, looking to add one or two BC/BE family physicians. Superb benefits and retirement package, very liberal vacation time. Limited ER call. Contact: Jim Schulte, Redwood Falls Hospital, 100 Fallwood Road, Redwood Falls, MN 56283; 507/637-2907.

3-7/92

ENT Physician: Busy otolaryngologist is seeking an associate to meet the needs of a growing practice. BC/BE physician will find security in this established multispecialty clinic. Location is 15 minutes from downtown Minneapolis and is rich in family, cultural, educational, and recreational opportunities. For further information, contact: Rolf Skogerboe, M.D., Columbia Park Medical Group, 6341 University Avenue NE, Fridley, MN 55432; 612/571-0457.

3-8/92

Full- or Part-Time Family Physician or Internal Medicine Physician for outpatient family practice clinics. No ob, no ER or hospital responsibilities. Very progressive north lakes practice located in Nisswa, Pequot Lakes, and Pine River, Minnesota. Contact Fred Huff, Pine and Lakes Clinics, Box 88, Pine River, MN 56474.

3-7/92

General Internists: Four BC/BE needed to join 12 in multispecialty clinic in Iowa on the scenic bluffs of the Mississippi overlooking Illinois and Wisconsin. Come grow with us! Sixty-five physician owners manage clinic and HMO. Above-average income potential, excellent call schedule, friendly, family lifestyle. Full benefits. Call or write Denis Albright, Director of Physician Recruiting, Medical Associates Clinic, P.C., 1000 Langworthy, Dubuque, IA 52001; 319/589-9981.

*3-8/92

Pediatrics, General Surgery, Family Practice—Wisconsin: Single specialty groups seek BC/BE physicians for partnership in exceptional south-central community. Shared call, fully equipped and staffed office, very competitive guaranteed salary, and comprehensive benefits package. **Family Practice—Minnesota:** Single specialty group practice in Minnesota River Valley community of 9,000 located 25 miles from Minneapolis seeks family physician for broad-based primary care. **Locum Tenens** positions available throughout Minnesota. For information on these and other opportunities in the Upper Midwest, send CV to: Mary Jo Cordes, President, MDsearch, PO Box 21507, St. Paul, MN 55121; or call collect 612/454-7291, Fax: 612/454-7277.

*4-9/92

BC/BE Family Physician: Part-time or full-time practice in growing community clinic serving the uninsured and culturally diverse. Contact Dr. Janet Schmitt, Medical Director, or Nancy Briggs, Director, North End Medical Center, 135 Manitoba, St. Paul, MN 55117; 612/489-8021. 2-7/92

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Psychiatrist, Cambridge, Minnesota: Cambridge Regional Human Services Center, a 225-bed facility serving MR/DD clients, seeks a part-time consultant psychiatrist with an interest and/or experience in treating persons with mental retardation. Competitive salary. One hour from the Twin Cities. Contact David Paulson, M.D., Medical Director, 1235 Highway 293, Cambridge, MN 55008; 612/689-2121.

3-8/92

Eugene, Oregon: 48-physician multispecialty group is seeking BC/BE family physician. Practice includes ob. Excellent schools. Abundant cultural and recreational opportunities. Near Cascade Mountains and coast. Home of University of Oregon. Please send CV to: Sylvia Emory, M.D., Oregon Medical Group, 1650 Chambers, Eugene, Oregon 97402; or phone: 503/686-1711.

*3-8/92

Issues in Primary Care: September 25-26, 1992, Landmark Inn and Resort, Egg Harbor, Wisconsin. For more information contact: Nadine Punke, Office of Medical Education, 1000 North Oak Avenue, Marshfield, Wisconsin 55449; 800/782-8581, Ext. 5207.

3-8/92

National Company Seeks Physicians—Contractor Basis: Immediate opportunity for licensed physicians in the Minneapolis/St. Paul area to complete insurance physicals on a part-time basis. Make your own hours; competitive pay. Contact Gretchen Michalski, 612/421-6777. 2-7/92

Join a Progressive Medical Group in Central Minnesota

St. Cloud Medical Group, P.A., a 23-physician multispecialty group, is now recruiting BC/BE physicians in the following specialties:

- Occupational Medicine
- Pediatrics
- Family Practice

Guaranteed first-year salary and production program thereafter with a full fringe benefits package.

Call or send CV to:

Daryl Mathews, Administrator
St. Cloud Medical Group
1301 West St. Germain Street
St. Cloud, MN 56301
Phone: 612/251-8181

Position Available for Family Physician in Suburban St. Paul:

Exceptional opportunity exists to join our clinic of three family physicians, three internists, and one pediatrician. The practice combines the satisfaction and independence of a small practice with the many benefits of an affiliation with a larger multispecialty group. Comfortable and pleasant working conditions and an excellent benefits package. Part-time or full-time positions are available. Please contact Karen Steiner, M.D., Ramsey Clinic Maplewood, 1774 Cope Avenue, Maplewood, MN 55109; 612/770-1497. Equal Opportunity Employer. *2-7/92

The Monticello Clinic: Well-established multispecialty clinic adjacent to 39-bed acute-care/91-bed long-term care facility in a rural setting seeking a BC/BE family practitioner. Ideal location to raise a family. Thirty miles from large metropolitan area. Year-round cultural and recreational activities. Excellent salary guarantee, production incentive, and benefits package. For more information, contact: Penny M. Vail, Director, Clinic Services, North Memorial Medical Center, 3300 Oakdale North—3E Perinatal, Minneapolis, MN 55422; 612/520-4839. 3-8/92

Northbrook Clinic: Special opportunity for BC/BE family practitioner to join a well-established, three-physician clinic. This practice will be moving in 1992 to a new facility. This northern suburb offers a safe family environment and outstanding educational, cultural, and recreational amenities. Excellent salary guarantee, production incentive, and benefits package. For more information, contact: Penny M.

Vail, Director, Clinic Services, North Memorial Medical Center, 3300 Oakdale North—3E Perinatal, Minneapolis, MN 55422; 612/520-4839. 3-8/92

Wayzata Family Physicians: Special opportunity for BC/BE family practitioner to join a well-established, five-physician practice located in a prime suburb community near beautiful Lake Minnetonka. The area is surrounded by top-quality schools, shopping centers, and an abundance of recreational, family, and social activities. Excellent salary guarantee, production incentive, and benefits package. For more information, contact: Penny M. Vail, Director, Clinic Services, North Memorial Medical Center, 3300 Oakdale North—3E Perinatal, Minneapolis, MN 55422; 612/520-4839. 3-8/92

University of Minnesota—Physician Position: Boynton Health Service, a multispecialty outpatient facility affiliated with University of Minnesota Hospital and Clinic, is seeking two primary care physicians. Join our 18 general practitioners and specialists in serving a diverse population including 50,000 students, 3,700 international students, faculty from over 100 countries, and the university's staff. In-house laboratory, X-ray, pharmacy, and in-house surgical consultation available. These academic appointments require an M.D./D.O. degree, BC/BE in primary care specialty, and Minnesota licensure. Must have a broad range of medical abilities and relate well with an educated, health-conscious clientele. Excellent salary commensurate with training and experience. Work schedule involves limited inpatient care beginning in 1992. A four-day work week is negotiable. Outstanding benefits include a generous academic-status retirement program (university contributes 13 percent); paid professional liability insurance; health, dental, and disability coverage; and CME and teaching opportunities. Position available as soon as possible, but no later than September 15, 1992. Please send résumé and three letters of reference by July 24, 1992, to: Boynton Health Service, Attention: Donald Severson, M.D., Chair, Search Committee, 410 Church Street SE, Minneapolis, MN 55455; 612/624-2933. The University of Minnesota is an equal opportunity educator and employer. *1-7/92

The Morris Medical Center, P.A., is currently seeking a family practitioner to join our multispecialty group. Morris, Minnesota, is a community of 5,500 residents with a four-year liberal arts college. Contact: Mike Flicker, Administrator, PO Box 600, Morris, MN 56267; 612/589-3232. 6-12/92

Physician licensed in the state of Minnesota to perform insurance-type physicals in automated plasmapheresis facility. Flexible PT hours available. ABI, 1552 East Lake Street, Minneapolis, MN 55407. Contact: Joan Jury, 612/721-6464. 2-8/92

Manitowoc, Wisconsin: The Manitowoc Clinic, an 18-physician multispecialty group, is seeking BC/BE general surgeons, pediatricians, and obstetrician/gynecologists. Lovely community of 35,000 located mid-state on the shore

of Lake Michigan. Guaranteed first-year salary and excellent benefits package. Contact or send CV to: James Robinson, Administrator, 601 Reed Avenue, Manitowoc, WI 54221-1270. Telephone: 414/682-8841. 3-9/92

Internist BC/BE to join six-person IM department in 28-physician multispecialty clinic, an affiliate of the University of Minnesota Hospital and Clinic. Growing practice in attractive community, located along the Mississippi River, one hour from Minneapolis/St. Paul. Competitive salary, good benefits, four weeks' vacation, two weeks' CME per year. Call or send CV to: Paul Luetmer, M.D., Highway 61 West, Red Wing, MN 55066; 612/388-3503. 1-7/92

General Surgeon: Busy clinical and surgical practice seeks BC/BE general surgeon to join existing department in rapidly growing multispecialty clinic. Located in the northwestern suburbs of Minneapolis, Minnesota, offering suburban living with easy access to an unlimited array of family, cultural, educational, and recreational opportunities. Members of our group earn a highly competitive salary and excellent benefits, including paid vacation and CME; pension and profit-sharing plans; paid malpractice; health, life, dental, and disability benefits. For further information, contact: John Bordwell, M.D., 9055 Springbrook Drive, Coon Rapids, MN 55433; 612/780-9155. *1-7/92

Ophthalmologist: Medical ophthalmologist to join existing department in expanding multispecialty clinic located in northern suburbs of Minneapolis, Minnesota. Department

currently consists of one ophthalmologist, two optometrists, certified ophthalmic and optometric technicians. Full-time or part-time medical ophthalmology practice with limited emergency call schedule. Highly competitive first-year salary guarantee, production-directed compensation, excellent benefits package. Respond with CV to: John Bordwell, M.D., 9055 Springbrook Drive, Coon Rapids, MN 55433; 612/780-9155. *1-7/92

Two-Year Guarantee: Earn six-figure net income, send your children to the nation's best schools, work 9-to-5, and enjoy 1:3 to 1:7 call coverage in rural Iowa. Signing bonuses from \$10,000 to \$50,000, plus practice management. Inpatient or outpatient available. Let someone else pay your malpractice, family health, life, and disability insurance, as well as relocation and CME expenses. Associate with financially sound 200-bed regional hospital. Benefit from low unemployment and cost of living, and very little crime or pollution. For more information, call Bill Cox at 800/776-7901, ext. 1-247, or send your CV to his attention at Harris Kovacs Alderman, 5420 Southern Avenue West, Suite 407, Indianapolis, IN 46241. You can also fax your CV to his attention at 317/247-8533. *1-7/92

Big Sky Country: Unique practice opportunities in Billings, Montana. We've got blue skies, fresh air, and plenty of elbow room. We hike, fish, and ski at the foot of the Rocky Mountains. Our children attend neighborhood schools that rank among the highest in the nation. Art, drama, and music flourish. Billings, Montana's largest city, was named the

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Resort community with abundance of winter and summer recreational outlets.

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Send CV to: Terence J. Kennedy, M.D., 1500 Irving St., Alexandria, MN 56308 or call 1-800-762-1177.

Glencoe Medical Clinic, P.A.

The Glencoe Medical Clinic has completed a \$1 million expansion project and is offering outstanding opportunities for physicians in the following specialties:

- Family Practice • Pediatrics
- Internal Medicine • Ob/Gyn

You'll join a dynamic group of eight physicians (six FP, one IM, one surgeon) serving a burgeoning client base. Pleasant, growing community 47 miles west of the Twin Cities. Excellent compensation, benefits, call schedule. Please contact:

Tom Bettendorf, Administrator
Glencoe Medical Clinic
525 18th Street East
Glencoe, MN 55336;
612/864-3116 (collect)

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sixth most livable city in the United States by *Money* magazine this year. The Billings medical community provides sophisticated health care services to over 350,000 people in a four-state area. Modern, well-equipped facilities make available the best in advanced medical technology—two hospitals, an MRI center, a cancer center, psychiatric and rehabilitation services. We are looking for an internist, oncologist, nephrologist, neurosurgeon, general surgeon, gastroenterologist, and a pediatrician. Please forward your CV or contact Montana Associated Physicians, Inc., 1242 North 28th Street, Billings, Montana 59101; phone: 406/248-1635.

*1-7/92

Scenic Niagara Frontier: Ramsey-trained family practitioner/geriatrician with busy long-term care and hospital-based practice is looking for an aggressive FP or IM to help implement several business ventures, including CORE, TEFRA-HMO in long-term care, and acute-care unit for nursing home patients. University affiliation and research opportunities available. Located on the beautiful Niagara Frontier of western New York (Buffalo metropolitan area) just 90 minutes from Toronto, the position provides a high salary in an area with low cost of living. Contact: Stephen J. Evans, M.D., Elder Medical Services, 815 Hopkins Road, Williamsville, NY 14221.

1-7/92

Wisconsin—Fourth BC/BE Obstetrician/Gynecologist needed to join stable, progressive, primary-care-based HMO/group practice in university town of 60,000 near Minneapolis/St. Paul. Excellent quality of life and outstanding recreational area. Competitive salary and fringe benefits. Contact: Stuart R. Lancer, M.D., M.B.A., Medical Director, Group Health Cooperative, PO Box 3217, Eau Claire, WI 54702-3217; 715-836-8552.

*3-9/92

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BRIEF SUMMARY

Contraindications: Severe LV dysfunction (see *Warnings*), hypotension (systolic pressure < 90 mm Hg) or cardiogenic shock, sick sinus syndrome (if no pacemaker is present), 2nd- or 3rd-degree AV block (if no pacemaker is present), atrial flutter/fibrillation with an accessory bypass tract (eg, WPW or LGL syndromes), hypersensitivity to verapamil.

Warnings: Verapamil should be avoided in patients with severe LV dysfunction (eg, ejection fraction < 30%) or moderate to severe symptoms of cardiac failure and in patients with any degree of ventricular dysfunction if they are receiving a beta-blocker. Control milder heart failure with optimum digitalization and/or diuretics before Calan SR is used. Verapamil may occasionally produce hypotension. Elevations of liver enzymes have been reported. Several cases have been demonstrated to be produced by verapamil. Periodic monitoring of liver function in patients on verapamil is prudent. Some patients with paroxysmal and/or chronic atrial flutter/fibrillation and an accessory AV pathway (eg, WPW or LGL syndromes) have developed an increased antegrade conduction across the accessory pathway bypassing the AV node, producing a very rapid ventricular response or ventricular fibrillation after receiving I.V. verapamil (or digitalis). Because of this risk, oral verapamil is contraindicated in such patients. AV block may occur (2nd- and 3rd-degree, 0.8%). Development of marked 1st-degree block or progression to 2nd- or 3rd-degree block requires reduction in dosage or, rarely, discontinuation and institution of appropriate therapy. Sinus bradycardia, 2nd-degree AV block, sinus arrest, pulmonary edema and/or severe hypotension were seen in some critically ill patients with hypertrophic cardiomyopathy who were treated with verapamil.

Precautions: Verapamil should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) or impaired renal function, and patients should be monitored for abnormal prolongation of the PR interval or other signs of overdosage. Verapamil may decrease neuromuscular transmission in patients with Duchenne's muscular dystrophy and may prolong recovery from the neuromuscular blocking agent vecuronium. It may be necessary to decrease verapamil dosage in patients with attenuated neuromuscular transmission. Combined therapy with beta-adrenergic blockers and verapamil may result in additive negative effects on heart rate, atrioventricular conduction and/or cardiac contractility; there have been reports of excessive bradycardia and AV block, including complete heart block. The risks of such combined therapy may outweigh the benefits. The combination should be used only with caution and close monitoring. Decreased metoprolol and propranolol clearance may occur when either drug is administered concomitantly with verapamil. A variable effect has been seen with combined use of atenolol. Chronic verapamil treatment can increase serum digoxin levels by 50% to 75% during the first week of therapy, which can result in digitalis toxicity. In patients with hepatic cirrhosis, verapamil may reduce total body clearance and extrarenal clearance of digoxin. The digoxin dose should be reduced when verapamil is given, and the patient carefully

monitored. Verapamil will usually have an additive effect in patients receiving blood-pressure-lowering agents. Disopyramide should not be given within 48 hours before or 24 hours after verapamil administration. Concomitant use of flecainide and verapamil may have additive effects on myocardial contractility, AV conduction, and repolarization. Combined verapamil and quinidine therapy in patients with hypertrophic cardiomyopathy should be avoided, since significant hypotension may result. Concomitant use of lithium and verapamil may result in a lowering of serum lithium levels or increased sensitivity to lithium. Patients receiving both drugs must be monitored carefully. Verapamil may increase carbamazepine concentrations during combined use. Rifampin may reduce verapamil bioavailability. Phenobarbital may increase verapamil clearance. Verapamil may increase serum levels of cyclosporin. Verapamil may inhibit the clearance and increase the plasma levels of theophylline. Concomitant use of inhalation anesthetics and calcium antagonists needs careful titration to avoid excessive cardiovascular depression. Verapamil may potentiate the activity of neuromuscular blocking agents (curare-like and depolarizing), dosage reduction may be required. There was no evidence of a carcinogenic potential of verapamil administered to rats for 2 years. A study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. Pregnancy Category C. There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor, and delivery only if clearly needed. Verapamil is excreted in breast milk; therefore, nursing should be discontinued during verapamil use.

Adverse Reactions: Constipation (7.3%), dizziness (3.3%), nausea (2.7%), hypotension (2.5%), headache (2.2%), edema (1.9%), CHF, pulmonary edema (1.8%), fatigue (1.7%), dyspnea (1.4%), bradycardia: HR < 50/min (1.4%), AV block: total 1°, 2°, 3° (1.2%), 2° and 3° (0.8%), rash (1.2%), flushing (0.6%), elevated liver enzymes, reversible non-obstructive paralytic ileus. The following reactions, reported in 1.0% or less of patients, occurred under conditions where a causal relationship is uncertain: angina pectoris, atrioventricular dissociation, chest pain, claudication, myocardial infarction, palpitations, purpura (vasculitis), syncope, diarrhea, dry mouth, gastrointestinal distress, gingival hyperplasia, ecchymosis or bruising, cerebrovascular accident, confusion, equilibrium disorders, insomnia, muscle cramps, paresthesia, psychotic symptoms, shakiness, somnolence, arthralgia and rash, exanthema, hair loss, hyperkeratosis, macules, sweating, urticaria, Stevens-Johnson syndrome, erythema multiforme, blurred vision, gynecostasia, galactorrhea/hyperprolactinemia, increased urination, spotty menstruation, impotence.

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*Physicians Retire
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He's Got His Mommy's Eyes. He's Got His Daddy's Smile. But Will He Get His Grampa's Assets?



We've all heard horror stories of how inheritances somehow get "inherited" by the tax collector. How do I know that won't happen to Billy the Third? How do I plan my estate so the assets will be there when he needs a leg up for college in 2010? Search me.

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I've tried managing on my own. Whew! With a broker here. A tax man there. Here a lawyer. There a banker. And everywhere crossed wires. Trouble is, each of these specialists specializes separately. And what I need is not separateness — but consolidation. I need some kind of

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AUGUST 1992 VOLUME 75 NUMBER 8

FACE TO FACE

Finding Success and Happiness in Retirement: Planning is the Key

Minnesota Medicine interviews Robert Veninga, Ph.D., author of "Your Renaissance Years: Making Retirement the Best Years of Your Life"

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COVER

Retirement means different things to different people, says this month's cover story (page 16), which tells how a number of retired Minnesota physicians have found fulfillment. In our Face to Face interview (page 7), Robert Veninga, author of a book about what he calls the "renaissance years," offers advice for planning a happy, successful retirement, which he believes can be one of the best times in life.

Cover illustration by Kate Mueller, a Minneapolis free-lance illustrator.

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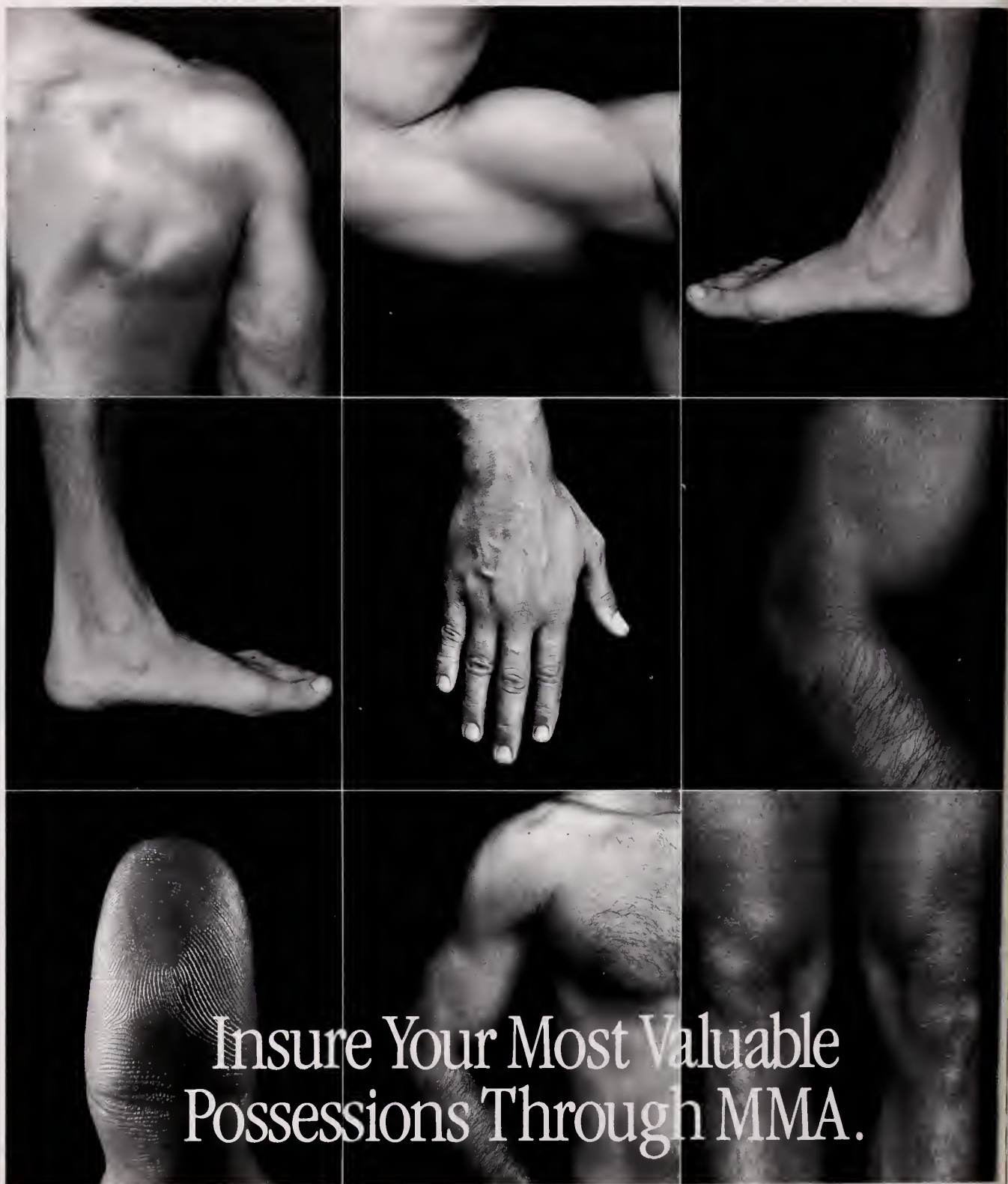
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September

10 & 11 Second Annual Children's Hospital of St. Paul Practical Pediatrics Conference—8:00am – 5:00pm—United/Children's Hospital Conference Center, St. Paul

12 Cardiac Centers First Annual Physician Symposium: "Sudden Cardiac Death and Syncope"—7:00am – 1:30pm—Health One Mercy Hospital, Coon Rapids

October 2 & 3

Epilepsy Progress Conference: Update on Medical and Surgical Treatment (Minnesota Epilepsy Group PA)—United/Children's Conference Center, St. Paul

9 Current Clinical Cardiology for Physicians Conference and the Eleventh Annual Jesse E. Edwards, MD, Lecture—8:00am – 6:00pm—United/Children's Conference Center, St. Paul

16 & 17 Advanced Life Support in Obstetrics (ALSO) Course—7:30am – 5:00pm—United/Children's Conference Center, St. Paul

19 & 20 Advanced Trauma Life Support (ATLS™) Course—7:30am – 5:00pm—United/Children's Conference Center, St. Paul

23 & 24 Fifth Annual New Ulm Fall Seminar—Holiday Inn, New Ulm

November

14 Fourth Annual Oncology Conference—8:00am – 4:30pm—United/Children's Conference Center, St. Paul

Educational Telephone Network 1992 Fall Scheduled Events

September

8 "Medical Imaging: What Test Shall I Order?"—Cornelius W. Wiens, MD, United Hospital St. Paul

22 "Lyme Disease: Diagnosis and Management"—Robert Tofte, MD, Health One Mercy Hospital

October

6 "The Short Stature Child: Who Should be Evaluated?"—Joseph J. Sockalosky, MD, Children's Hospital of St. Paul

20 "Hepatitis B: New Vaccine Recommendations"—Deborah L. Wexler, MD, United Hospital St. Paul

November

3 "Hyperlipidemia"—Richard H. Grimm, MD, University of Minnesota

17 "Efficient Thyroid Testing: Is It Possible?"—William K. Natale, MD, United Hospital St. Paul

December

1 "Current Concepts in Oral Antibiotics"—Richard Quintiliani, MD, Hartford Hospital, Hartford, CT

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Retirement Doesn't Always Come Easy

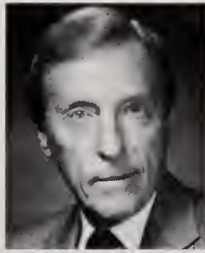
Edmund C. Burke, M.D.

Physicians do a marvelous job planning their futures through premed, medical school, fellowship programs, and finally a professional career, but when it comes to planning our second careers—retirement—we seem to flounder. Retirement approaches like an avalanche: you see and hear it, then suddenly you are in it.

As a retiree, I know from experience the emotions that accompany retirement. Planning and discussing help make the transition easier, but regardless of preparation, retirement often comes as a shock to physicians. I believe this is related to the nature of a career in medicine, which is different from a career in business or industry. Think back to the preparation for medical school and the anxiety that accompanied the application process; the stress of medical school, which was serious and sometimes even terrorizing; and finally, the day of graduation—the glorious moment when we were handed our diplomas, designating us as doctors of medicine. Residency and fellowship programs followed, as well as decisions about where to practice and with whom. Subsequently, we danced our prominence in the profession, either in a general or a specialty practice.

Medicine is a unique profession. It is highly personalized and requires a great deal of involvement and compassion. Medicine provides gratification through patient contact and respect as well as through the intellectual stimulation provided by colleagues. Every day is a new adventure.

Then, suddenly, we realize retirement is fast approaching. How do we know what to expect? Although retirement means something different to different people, it always brings



**“Retirement takes
some mental
adjustment—deal
with it head on.”**

change—change in relationships with former colleagues and with spouses, change in our everyday activities, and possibly even change in our mental outlook.

The best way to keep a positive mentality is to launch a new “career” that provides an agenda for each day. This career may or may not be related to medicine, but it should be something pleasurable that you happily anticipate. For example, volunteerism, either locally or in a foreign setting, may be a grand and fulfilling experience you can now enjoy.

Robert Veninga, Ph.D., author of “Your Renaissance Years: Making Retirement the Best Years of Your Life,” believes retirement should be a time of exploration and enrichment. In this month’s Face to Face interview (page 7), he discusses his book and offers advice for planning a successful retirement. He emphasizes that the happiest retirees are those who define what they’re retiring to—a new hobby or travel, for example. In this month’s cover story (page 16), a number of Minnesota physicians tell

how they’ve found fulfillment in retirement.

Retirement can be difficult at first. Depression is not uncommon, but it is usually shortlasting. Retirement takes some mental adjustment; my advice is to deal with it head on. Find something new and stimulating to do with your time and do not dwell upon the past.

It is wise to examine your attitudes toward retirement early and to anticipate the emotions it will bring. Consider attending sessions with your spouse on financial planning, and arrange sessions with a psychologist or counselor to discuss the difficulties you can expect. Try to change your outlook and plan a new set of activities—things you genuinely love. Whatever you plan, be sure to leave adequate time to play golf, travel, sail, garden, or whatever you highly value. Remember, this is a time to enjoy life. Make good use of the initiative and resourcefulness you utilized in planning your medical career. Some retirees are better at this than others, but most are able to make career adjustments.

While there may be some unpleasant surprises—such as a change in the way former colleagues talk with you and fleeting thoughts that you will never be as good a doctor—there are also delightful surprises. You can retain treasured friendships; you may have grandchildren to enjoy; and you and your spouse will have time to learn more about each other. In addition, you can maintain your sense of pride and worth by taking up new activities you find rewarding.

One word of caution—don’t get overscheduled. If it ain’t fun, don’t do it. Enjoy.

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Finding Success and Happiness in Retirement

Planning is the Key

Minnesota Medicine interviews Robert Veninga, Ph.D.

Retirement used to be a time to slow down and disengage from life, but not anymore, says Robert Veninga, Ph.D., author of *"Your Renaissance Years: Making Retirement the Best Years of Your Life"* (1991 Little, Brown and Co.). "It should, instead, be a time of exploration, continued challenge, and enrichment. ... Millions of Americans agree that the best time of their lives began after they left the nine-to-five world behind," says Veninga, whose book gives practical advice for enjoying retirement.

Dr. Veninga, professor in the School of Public Health at the University of Minnesota, says the key to a successful retirement is creative planning. In his survey of 135 retirees, those with the happiest retirements had defined what they were retiring to—a hobby, volunteer work, or travel, for example—rather than simply retiring from something, such as a demanding job. In this interview, he discusses handling retirement finances, deciding whether to relocate, dealing with changing relationships, and other topics from his book.

Dr. Veninga stresses that the first six to nine months of retirement can be difficult. For one, marital relationships change. "The day after retirement begins, two individuals who have lived an active life are thrust together for most of the day and night. It is not uncommon for conflicts to come crashing to the surface as spouses vent frustrations—many of which were suppressed while raising children and pursuing busy careers," writes Veninga in *"The Renaissance Years."* After the adjustment phase, retirees who report high life satisfaction have one thing in common, says Veninga: "Their energy is focused on achieving important goals."

Dr. Veninga's academic interest is in leadership, organizational change, and career renewal. He is an award-winning author of several books, including *"The Work/Stress Connection: How to Cope with Job Burn-out"* (with James P. Spradley), *"The Human Side of Health Administration: A Guide for Hospital, Nursing and Public Health Administrators,"* and *"The Gift of Hope: How We Survive Our Tragedies."*

Minnesota Medicine: Dr. Veninga, thank you for agreeing to talk to *Minnesota Medicine* about your book, *"Your Renaissance Years: Making Retirement the Best Years of Your Life,"* which I understand was published about a year ago. First, tell me a little about where you grew up and about your educational background and career.



Robert Veninga, Ph.D.

"The greatest danger is to cut back suddenly and not live an active life."

Veninga: I grew up in several Midwestern communities, but I consider Sioux Falls, South Dakota, my home. I am now a professor in the Division of Health, Management, and Policy in the School of Public Health at the University of Minnesota. I hold graduate degrees from the University of Minnesota in speech communication.

Minnesota Medicine: How does your background in speech communication relate to your position in public health?

Veninga: I am responsible for teaching courses in communication, human relations, and organizational behavior to health sciences students.

Minnesota Medicine: When did you join the School of Public Health and how did you end up there?

Veninga: When I was searching for a place to begin my teaching career in 1972, I looked all around the country, and I found few, if any, other possibilities that appeared as exciting as the opportunity in the School of Public Health. I love to teach with a multidisciplinary faculty—with individuals who have interests in many different areas. It seemed to be an ideal fit for the kinds of teaching I wanted to do.

Minnesota Medicine: I'd like to talk to you about your book. First, what's your philosophy on retirement?

Veninga: I firmly believe that retirement can represent one of the very best times in life. The French divide life into three ages. The first is learning, the second is working, and the third is living. I think they have it right. Retirement can a time for finding the best life has to offer.

Continued

'Your Renaissance Years'

Minnesota Medicine: Is your book divided into sections along these lines?

Veninga: The book is divided into a number of sections. The first section, a fairly substantive part of the book, is on how to manage money. Many retirees today are concerned about making their money last, and they have a lot of questions about how to best manage their financial resources. This section discusses how to invest for retirement.

Another section deals with where retirees should live. A lot of people wonder whether they should move to Arizona or to Florida. This section of the book discusses various parts of the country, including the strengths and weaknesses of a number of them.

The third section is on relationships. Relationships change as we get older—relationships with our adult children, relationships with the person we're married to. I wanted to focus on relationships in retirement, especially marital relationships. Do they get better? Do they get strained? What actually takes place?

A big section of the book deals with how we preserve our health in retirement. Obviously, physicians who retire are familiar with health issues, but I tried to include some prevention strategies in this part of the book that can help people live as long as possible. Finally, the last section deals with the spiritual component of retirement,

such as focusing on what is meaningful in your life and acting on it in retirement. That turned out to be my favorite part of the book.

Retirement's Challenges

Minnesota Medicine: What is the biggest problem for retirees?

Veninga: One of the biggest problems for retirees is that they often do not define what they're retiring to. They know what they're getting out of. They may say things like, "I'm getting out of a hectic schedule. I'm getting out of paperwork. I'm getting out of a heavy caseload," for instance, with physicians. But they don't know what they are retiring *to*. The most successful individuals I interviewed, in terms of having a great retirement, were those who formulated what they wanted to do before they retired. For some it meant traveling; for others it meant starting a new career. For some it meant becoming engaged in volunteer work, and for others it simply meant starting a new hobby or avocation. The people who have the best retirements are those who know what it is they want to do in their retirement years. This does not mean you have to have a definitive plan, but you should have a sense that your life is moving in the direction you really want it to move, and not that you're simply getting away from a job that has some unfavorable characteristics.

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Minnesota Medicine: Do you think certain groups of people have a more difficult time than others? For example, lawyers, bankers, doctors, or teachers?

Veninga: In general, I did not see differences between occupational groups. The main criteria in terms of whether retirement was successful was whether or not the retiree had made good plans for it.

Minnesota Medicine: It seems that a lot of talented professionals have a difficult time ending their careers. They continue to look backward at their old careers instead of forward to something new.

Veninga: That is a very good point. I interviewed a number of people who started new careers. Some did it to make money because they were concerned about finances; others started new careers because it was something they had always wanted to do. Those who have an agenda, in terms of starting a new career, using skills in a volunteer capacity, or developing a meaningful avocation, tend to have excellent retirements.

Minnesota Medicine: Are there any differences between men and women retirees?

Veninga: Yes, their problems are somewhat different. First of all, women, particularly single women, tend not to be as financially well off as men. This is not always true, of course, but women facing retirement oftentimes have financial problems that men do not have. Additionally, as a woman ages, there is a good chance she will outlive her husband and will have to face living alone. This can be very difficult.

Minnesota Medicine: What are some of the mistakes retirees make?

Veninga: One mistake is that we underestimate how long we might live. The majority of people who reach age 65 will live to be 85, and nearly 40 percent will live to be 90. One big mistake people make in terms of financial management is not keeping a portion of their financial assets in growth-oriented stocks and/or mutual funds. The tendency is for retirees to become very conservative with their money and put everything in fixed-income investments, such as savings accounts or certificates of deposit. I understand the reasons for doing that, and in some cases it's warranted. But in general, a portion of one's financial resources should be kept in growth-oriented investments. The percentage, of course, depends on the individual's needs for predictable income, which fixed-income investments provide. But, as a rule of thumb, somewhere between 25 percent and 40 percent of one's financial assets should be in growth-oriented investments. It is worth noting that if you retire on \$30,000, you will need \$44,000 to pay the same bills 10 years later, assuming that expenses rise at an annual rate of 4 percent. In 25 years, you'll need \$80,000.

Minnesota Medicine: I notice that companies are spending more time preparing people for retirement.

Veninga: That's true, and the results are very heartening. A number of Fortune 500 companies routinely hold seminars for prospective retirees. The programs cover the advantages of early and late retirements and help employees manage their finances.

A Healthy, Productive Retirement

Minnesota Medicine: How about health problems? Were they common among the people you interviewed?

“Most people aren't prepared for the first six to nine months of retirement, which tend to be difficult.”

Veninga: The people I interviewed were remarkably healthy. That doesn't mean they didn't have health concerns. But, in general, the 135 people I surveyed for this book were in very good shape. They were traveling, active, busy. They were very alert mentally. The ones who tended to be in the best shape were the ones who were making a deliberate effort to stay healthy. They were exercising

regularly. They were mentally active as well; they were going to lectures and movies and subscribing to journals and magazines, for example. They were very much involved with life. I think the greatest danger to one's mental health after retirement is to cut back suddenly and not live an active life. Without a doubt, the happiest retired people I met were those who were very busy and continued to pursue meaningful goals.

Minnesota Medicine: A lot of retired Minnesotans choose to head south for the winter. Others move to be closer to their children and grandchildren. What did you discover about this aspect of retirement?

Veninga: I suggest people be very careful before deciding to move elsewhere. I met a number of people who had moved to the South. For some, it was a good decision, but for others, it didn't turn out that way. When people move to a Southern state, they may not have any friends down there, they may find it difficult to make close friends, and, if their children are back in the North Country, they tend to miss them. Again, for some moving to the South is a wonderful thing to do—they make friends easily and have no regrets. But others told me they missed their former house; they missed the church or synagogue they belonged to; or they missed their friends. The best advice I can give is this: If you're thinking about moving to another part of the country, keep your home and move for six months during the most undesirable climatic conditions. For instance, if you're thinking about retiring to Arizona or Florida, go there when the heat and humidity are at their worst so that you can experience what it's like during the least desirable time of the year. Interestingly, only 5 percent of retirees today relocate, and 95 percent prefer retiring in their own community.

Minnesota Medicine: Let's touch on relationships. I can relate to what you said about relationships changing. There isn't any way you can anticipate that—you just go through it.

Veninga: I think that's right. I found that most people aren't prepared for the first six to nine months of retirement, which tend to be difficult. Oftentimes, marital relationships become strained. Retired spouses get on each other's nerves. Before retirement, they were living active and separate lives. Now they're with one another 20 to 24 hours a day. In "The Renaissance Years," I talk about the "Chief Executive Syndrome." This occurs sometimes when a professional retires who was used to giving orders at work. Now there's nobody to order around, and the retiree starts giving orders to his or her spouse. Of course, this causes tension.

Retirees often get "retirement blues" because they tend to look forward to retirement with great expectations, but the first six months are often difficult. The retiree is adjusting to a new routine and a new schedule. Suddenly, there's a newness that isn't always good. I tell

people to think about the first six to nine months of retirement as the adjustment phase. Some get through it quickly, but it takes longer for others. It's important to realize that this period is a normal part of the retirement process.

Minnesota Medicine: Let's talk briefly about spirituality. How did you deal with this subject in your book?

Veninga: The last chapter of the book was inspired by a person who hated the whole notion of retirement. I asked Job, one of the heroes in the Old Testament, to respond to his worries. The last chapter of the book, titled "A Message from Job," has Job giving the following advice for living a long, fruitful life: "So, old soul, here in brief is what I would say as you plan for your retirement years: Trust your intuition and your ability to make credible decisions for tomorrow. Forgive those who have been thorns in your side and love those who make each step of our journey worthwhile. Live for today and let go of regrets of yesterday. For if you do these things, you will come to understand that life is a precious gift that should be joyfully lived, no matter your age."

MM

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Riding in the HealthRight Rodeo

Senator Duane Benson

Cowboys ain't easy to love, but when we get knocked off our horses, we always get back on. During the HealthRight negotiations, this cowboy got knocked off his horse many times, but I always got back on. In 1991, the governor vetoed our first attempt at reining in health care costs and increasing access. This year, we passed HealthRight, which is designed to curb runaway health care costs and provide coverage for uninsured Minnesotans who fall in the gap between people with employer-provided or other private health insurance and those eligible for various federal and state health care programs.

Although some people didn't like the process we used to make HealthRight law, the bill's detractors were generally either adverse to any changes in our health care delivery system or were only interested in their piece of the health care pie.

Many doctors took the attitude of Carolyn J. McKay, M.D., president of the Minnesota Chapter of the American Academy of Pediatrics, who said in the June issue of *Minnesota Medicine* ("The Politics of HealthRight: Piecing It Together," page 21), "Physicians are the ones who deliver care and are aware of problems that politicians are not." That's true, but maybe more than anyone else, physicians need to be willing to help reduce health care costs if we are to save the very system physicians want to preserve.

You and I both know that every year our nation spends 13 percent to 14 percent of the GNP on health care, and health care costs are rising at three times the rate of inflation. Clearly, we can't continue along this destructive path. As *JAMA* editor George Lundberg, M.D., says, our health care system is headed for a "meltdown" by 1996. The future of HealthRight is in all of our hands. We can collectively attempt to reduce our burgeoning health care costs, or we can choose to avoid change. If we choose to look the other way, we'll have no one to blame but ourselves for the demise of our health care system. What is at stake here is no less than the future of

affordable access to quality health care.

Do we have anything to lose by trying to make HealthRight work? If we do nothing, I think most people in the health care industry would agree, we risk saddling ourselves with a single-payer system that places definite caps on providers and causes health care quality to suffer. Leland Kaiser, a self-proclaimed health care futurist from Colorado, believes that HealthRight is a "wake-up call" for the nation. Giving HealthRight a try will certainly reduce the inordinate amount of uncompensated care and cost shifting in our current system while ensuring quality and providing a mechanism for eliminating factors that drive costs up.

Currently, our health care system is heavily market driven. That's odd, considering that health care does not fit the classic marketplace stereotype, where knowledgeable consumers consult a multitude of competitive sellers. Who among us shops for his or her mother's health care like we shop for green beans? No one. And who knows which medical test does what? I certainly don't. Because patients with health insurance generally are not concerned about treatment costs and they find it difficult to determine quality, market forces cannot control health care costs. A number of HealthRight provisions will fill in where the marketplace mentality falls short, helping to ensure the delivery of cost-effective, high-quality care.

HealthRight should improve

some of the health care system's other obvious shortcomings, as well. As I've traveled throughout the state, most of the providers I've spoken with say they spend about 20 percent to 25 percent of their time filling out paperwork. Clearly, highly trained professionals should be devoting more time to hands-on care instead of pushing pencils. The medical malpractice reforms in HealthRight will help many providers reduce the cost of liability insurance, which will cut out much of the unnecessary paperwork.



"If we do nothing, we risk saddling ourselves with a single-payer system that causes health care quality to suffer."

The bill's cost-containment provisions include uniform billing, with an estimated savings in administrative costs of 3 percent to 5 percent, which should more than pay for the program. Furthermore, reforms in insurance underwriting should prevent policyholders from absorbing any additional costs.

“Most people in this country believe health care is a basic right; we’re saying they also should believe it’s a responsibility.”

HealthRight applies reasonable guidelines to physicians’ referral of patients to medical facilities in which the referring doctors have a financial interest. The legislation also institutes a state review of medical technology purchases to prevent unnecessary and inefficient duplication of equipment among health care facilities. This provision should provide great incentive to reduce costs within the health care system.

It is imperative that we investigate whether former U.S. Surgeon General C. Everett Koop, M.D., is correct in his assessment that we need “regulatory medicine.” Koop says, “I truly believe that 30 percent of current diagnostic and treatment procedures are medically unnecessary. If you could cut the fat alone out of the system, it would save \$200 billion annually.” It sure sounds like there is enough money in the system.

Cost-cutting is just one approach to saving health care dollars. HealthRight also helps contain costs by encouraging people to take care of themselves by exercising, eating right, quitting smoking, wearing seat belts, and adopting other healthy behaviors. In today’s society, we continue to place most of our health care emphasis on curing individuals after they get sick, instead of using preventive medicine. One-half to three-quarters of all health care needs are tied to personal behavior; by encouraging people to develop positive health care practices—which will enhance their quality of life—we can conceivably create a society of healthier individuals. By promoting healthy lifestyles, we can actually realize a cost savings of 20 percent to 25 percent. Most people in this country believe health care is a basic right; we’re saying it’s also a responsibility.

Cooperative arrangements among providers and among purchasers of medical equipment can also reduce health care spending and are encouraged by provisions included in HealthRight. These arrangements are currently prohibited by federal and state antitrust laws that would have to be changed to effect cost savings.

By no means are the provisions in HealthRight cast in stone. At the beginning of negotiations, I stated that HealthRight will evolve for the next 10 years. My vision

for HealthRight’s future depends on how many of us are willing to help reform our broken-down system.

HealthRight is the right first step in controlling health care costs while improving health care access. Throughout the course of the 1992 legislative session, I received massive amounts of unsolicited information—books, articles, letters, phone calls—supporting the enormous need for an improved health care system. Much of the information came from physicians who recognize health care reform as an opportunity, not a curse. This advocacy resulted in the HealthRight bill.

If we had done nothing this year—as many people had prescribed in the hopes that the federal government would take action—we’d be well on our way to Lundberg’s metaphorical meltdown. According to Robert Greenstein of the Center on Budget and Policy Priorities, “In little more than a decade, health care will consume a little more of the federal budget than defense did at the height of the Reagan buildup.”

I am extremely willing to work collectively with the health care community to maintain the tremendous quality of health care in this country. People can get on the wagon or be caught under its wheels as the horses blaze out of town. MM

Senate Minority Leader Duane Benson, an independent republican from Lanesboro, Minnesota, has served in the state Legislature since 1980. He is a member of the Senate Health and Human Services Committee and was a member of the bipartisan “Gang of Seven” that drafted HealthRight.

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Together, We Can Make HealthRight Work

Representative Lee Greenfield

I would like to thank *Minnesota Medicine* for the opportunity to share with readers my thoughts on the development and future of Minnesota's HealthRight law.

What issues forced the governor and the Legislature, DFLers and IRs alike, to develop and pass HealthRight? They were the rapidly rising cost of care, lack of access to affordable health insurance for working poor people, and unfair health insurance policies and practices in the small business and individual markets.

These problems threaten the overall ability of our state's citizens to receive health care when they need it. Currently, while 13.5 percent of the gross national product is spent on health care in this country, 10 percent of Americans (and 7 percent of Minnesotans) do not have health insurance. Last year, our average income rose 2 percent, while the general inflation rate rose 4 percent. Medical care costs rose 10 percent—more than five times the rate of personal income. In fact, the cost of health care has grown by double digits for each of the last 30 years. At this rate, we will be spending 20 percent of the GNP on health care by the end of this decade, and the number of people without insurance will certainly be greater.

Health insurance itself presents a separate set of problems: high overhead costs, questionable rating practices, and issue and renewal procedures in individual and small business insurance markets that "cherry pick" low-risk people, leaving those in need of substantial medical services without coverage.

Health care costs less in Minnesota than it does elsewhere. That's good, but the rate of medical inflation is the same here as it is everywhere else. Even in Minnesota, people are giving up health insurance because it's becoming too expensive. Workers are giving up on health care benefits in order to protect salary increases. The citizens of this state have told us time and again that they believe everyone should have access to health care. At the same time, they have grown increasingly fearful

that they, too, may lose coverage for themselves and their families.

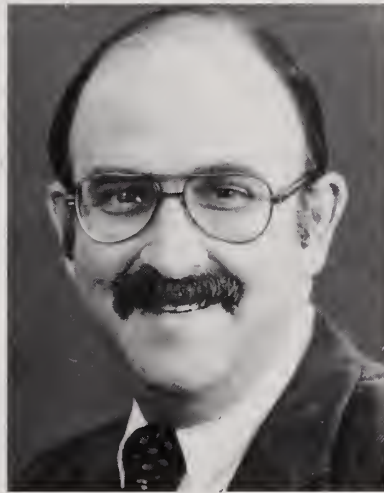
HealthRight is not, as some have suggested, an attack on the provider community. HealthRight commits the state to maintaining and improving health care, improving access, and controlling costs. It is an attempt at

reform that uses the existing players in the health care system in an effort to meet these goals. Legislators opposed rationing health care, such as the Oregon proposal, because we feel we can meet our goals through more efficient management of resources, without declaring certain medical conditions as "undeserving" of care.

HealthRight sets up a 25-member health care commission, made up of consumers, employers, health plans, medical providers, and state agencies. It also sets up at least four regional boards, also consisting of Minnesotans from the state's health care system and consumers—not bureaucrats. They are charged with finding ways to reduce the rate of growth in health care costs. In pursuing this goal, the commissioners will oversee the acceptance and utilization of new technology and procedures and assist in planning the future delivery of health care. The commissioners will report their findings and recommendations to the commissioner of health. The legislation made the commission advisory to the commissioner of health in order to avoid conflicts with separation-of-powers

provisions of the U.S. Constitution. Since the members are appointed by a variety of sources, including the governor and both houses of the Legislature, we believed the best way to handle this problem was to make the commissioner of health the final authority but make it clear that we expect the commissioner to follow the Health Care Commission's recommendations.

HealthRight also calls for data collection and the use of researched practice parameters. The statute requires the Health Care Commission to set up an analysis unit to collect data and develop a limited, condition-specific database. Wherever possible, these data will be collected



"I share the MMA's goal of universal coverage, and I want to work to make that a reality."

cooperatively with data for other entities. The state commission will use the data to monitor quality of care as well as medical inflation. Buyers will have access to the data to assist in their choice of providers.

A practice parameters advisory committee will consider the use of practice parameters such as those the Agency for Health Care Research and Policy of the U.S. Public Health Service is developing through its medical effectiveness studies. The first of these practice parameters will apply to a range of specialty surgeries. In Minnesota, the advisory committee will look at these parameters as they become available and advise the state commission on adopting them. If accepted, the research and practice parameters will be disseminated to practitioners. If the commission determines that practice in part or all of the state varies significantly from the parameters, it could require peer review. Peer review panels, made up of physicians and assembled by the Minnesota Medical Association, would serve a primarily educational purpose but would have the authority to go beyond this function if the panel deemed it necessary.

The success of utilizing practice parameters depends completely on the full cooperation of the physician community. There are benefits if this effort is successful. Under HealthRight, adherence to parameters is a complete defense in malpractice cases. The parameters will also help assure the public it's receiving quality care—with data to back it up. This will also help us address malpractice reforms in the future.

Enrollment in HealthRight is expected to reach about 160,000 by 1997. This is the number of people insurance actuaries believe will take advantage of the plan—without being compelled to. HealthRight's subsidized health plan should encourage a significant number of the currently uninsured, especially the working poor, to obtain coverage. This will lead to better access to health care, especially to primary and preventive care. While this will improve the current situation, I share the MMA's goal of universal coverage, and I want to work to make that a reality.

Reimbursement for HealthRight patients will be at Medical Assistance rates, which themselves have been increased an average 25 percent for care by physicians and 20 percent for outpatient hospital care. HealthRight is based on the concept that the state should provide adequate reimbursement rates for new programs, as well as for the Medical Assistance and General Assistance Medical Care programs. We will have to work together to keep these rates up in the years ahead.

HealthRight also attempts to increase access to health care through significant health insurance reform, especially in the small business market. The legislation should create a more stable and predictable market for purchasing health insurance. It places limits on pre-existing condition clauses, controls premiums in a way that moves toward community rating, provides minimum-loss ratios, guarantees issue in the small business market, and guarantees renewal in both the individual and small business markets. Small businesses will also be able to join risk-sharing pools to decrease administrative costs

and to increase their buying power in the health insurance market.

What do I see for HealthRight in the future? I hope it will lead to long-term solutions for the problems we have tried to address. I hope the change from a purely competitive model among health care providers to one involving cooperation and mutual planning will lead to better resource utilization. I hope the data initiatives and researched practice parameters will lead to improved quality health care and a reduction in unnecessary procedures and medical malpractice suits. I hope we can continue moving to community rating in health insurance and to lower administrative costs. And I hope we are able to expand affordable health care in a way that results in universal coverage for all Minnesotans.

Clearly, much is left to do before we reach these goals. We may disagree on some of the details, but we share the same ideals of affordable, quality health care for Minnesota. We need the cooperation of the physician community to help achieve HealthRight's goals.

I hope you will join us.

MMA

Rep. Lee Greenfield, a DFL state legislator representing Minneapolis, has served in the Legislature since 1978. He is chair of the House Human Resources Division of the Appropriations Committee, was a member of the bipartisan "Gang of Seven" that drafted HealthRight, and is co-chair of the Legislative Commission on Health Care Access, the legislative oversight commission for HealthRight.

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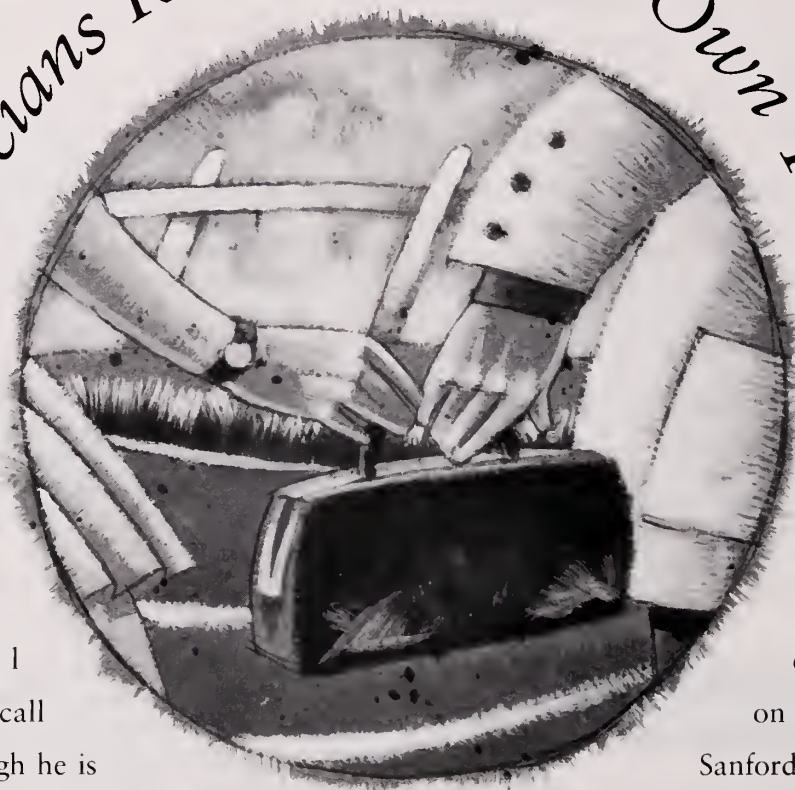
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Physicians Retire on Their Own Terms



Dr. Earl Hill can't call it quits, although he is slowing down. Earlier this

year, the 72-year-old internist closed his solo practice in downtown Minneapolis, but now he spends about 25 hours a week seeing ambulatory patients at the Veterans Administration Medical Center.

Julie Moller, M.D., an internist, and her husband, John Sanford, M.D., a surgeon, quit cold turkey from their practices at the Duluth Clinic when they turned 65. Both are active in the community, volunteering,

taking classes, and serving on civic boards.

Sanford still maintains ties to medicine as chair of

the steering committee for the rural access clinic in Cromwell, but neither he nor Moller intends to practice medicine again.

At 65, John W. Myers, M.D., wants to cut back. A heart attack five years ago prompted the family practitioner to reduce his hours somewhat, but not as much as he'd like. The shortage of physicians in rural Minnesota

keeps him as busy as ever, and for now, keeps retirement at bay.

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By Miriam K. Feldman

Illustrations by Kate Mueller

Retirement. There's no hard and fast rule about when or how physicians take down their shingle. The decision to retire is a personal one, which means there are as many retirement scenarios as there are physicians who retire. "Retirement is expected and generally occurs at 65," says Rodney Dueck, M.D., medical director of Park Nicollet Medical Center. But flexibility is the rule at Park Nicollet, as it is elsewhere.

Retirement: Many Things to Many People

"Retirement is a generic term," says Gerald Farley, director of the AMA's Senior Physicians Group (formerly the American Association of Senior Physicians). "It means different things to different people. Do you give up hands-on care or remain part time? It's difficult to define." But, adds Farley, "Most physicians want to retire on their own terms."

Not everyone faces the prospect of retirement with equanimity. It can be a difficult transition for many, according to Farley. "Physicians, when they first begin to practice, start talking about [retirement]. But ironically, the closer they get to it, the more they fear it."

They fear having too much time on their hands, or not having enough money, Farley says. "Many are reluctant to retire because they fear it's the last thing they'll do before death."

But retirement is just another beginning, says Farley, who conducts three-day retirement planning seminars around the country. He tells physicians it is simply moving from one life experience to another. "Retirement is just another graduation they have achieved. It's not a death sentence."

Earl Hill, unhappy with the dictionary definition of retirement—to withdraw—coined his own phrase, "later-life transition," to describe this stage of his life. "I suppose a few think this is a euphemism, but it means

something to me," he says. "Many people don't have that negative connotation about retirement. I didn't feel comfortable with that."

Hill didn't feel comfortable completely giving up medicine, either. A few years ago, he tested the waters and stayed home in the mornings to take art classes before going to work. But after years of rising early to see patients, Hill realized that he would have to continue doing something productive in the early part of the day. When the opportunity arose to work part time at the VA, he knew he'd found something he could do after closing his practice.

Groups for Retired Physicians

Stuart Lane Arey, M.D., doesn't take credit for what he calls "the greatest one-liner on retirement," but he uses it a lot. "Don't let your day revolve around getting a haircut," he likes to say. Arey, who retired at 76 after 51 years as a pediatrician, must have trouble finding time for a haircut, judging by his schedule. "I've had a wonderful time since I retired," says Arey, who is active in Rotary, skis in Sun Valley for one month every winter, raises money for the University of Minnesota, golfs, travels, and counsels young mothers in a program called Success By Six.

Arey also was the spark that led to the creation of the Hennepin County Medical Society's Senior Physician Association. It was Arey who suggested that retired physicians need a place to socialize, learn, and explore ways to serve the community. The first meeting, in June 1982, attracted 30 people. Ninety physicians showed up for the third meeting. "The thing took off," Arey says. Today the group has around 400 members who meet for lunch and a talk four times a year at different medical centers. Dues are \$10 a year, or \$50 for a lifetime membership.

There are other resources for retired physicians as well. Here's a list to get you started.

- **Hennepin County Medical Society's Senior Physician Association** has a summer outing planned for August 19 at the Old Log Theater. The next regular meeting is October 13 at the Phillips Eye Institute in Minneapolis. For more information, contact Nancy Bauer or Laura Collins, 612/623-3030.

- **Ramsey County Medical Society** recently organized a retired physician group patterned after the Hennepin County association. The group will meet two to four times a year. For more information, call Cathy Graci or Tom Mahowald, 612/291-1209.

- **The AMA's Senior Physician Group** is a membership organization that serves as a clearinghouse of information for physicians over 55. The group, which offers information about successful medical retirement, publishes a bimonthly newsletter that covers everything from travel opportunities to tips on developing pay-out arrangements, advice on investment portfolios, and vacation home exchanges. The organization also conducts three-day retirement planning seminars. For more information, contact Gerald Farley, 515 North State Street, Chicago, IL 60610.

- **"Your Renaissance Years: Making Retirement the Best Years of Your Life,"** by Robert Veninga, Ph.D., is not about physicians but is intended as a useful resource for anyone interested in retirement. The book was published in 1991 by Little, Brown and Co. and is available in most book stores.

"A lot of physicians out there may be putting off retiring because of a lack of other physicians available to take their place."

—Terry Hill

Saying Good-bye to Patients

Saying good-bye to patients after a lifetime of practice isn't easy, but it's a necessary part of the transition. Nadine Smith, M.D., a dermatologist, will retire later this year after 38 years in practice. She might have worked until 70, but with her son, Arthur Ide, III, M.D., poised to take over, she can retire at 65. "I've been telling them [her patients] all along that I'm retiring and that I want them to meet my son, because he will be taking over. They will feel more comfortable as they know him, and I feel comfortable leaving the practice with him," Smith says.

"When a physician retires, he or she owes it to the patient to establish continuity with another physician. I really think that's very important, so they're comfortable with my retirement, and I feel comfortable with my retirement," says Robert T. Kelly, M.D., who retired at age 65 after 39 years in family practice at the Itasca Clinic in Grand Rapids. Kelly spent his last year in practice finding physicians who would be compatible with his patients.

Compatibility is a luxury John W. Myers, M.D., can't even contemplate. He's worried that there may not be any physician to take over when he retires from his

practice in rural Canby. His partner is also nearing retirement age, and the only relief they get is from a locum tenens physician who covers for them every other weekend. Myers says he and his partner "are hanging in here, hoping we can get someone before we leave."

"We've got a lot of physicians out there who may be putting off retiring because of a lack of other physicians available to take their place," says Terry Hill, executive director of the Minnesota Center for Rural Health in Duluth. "I suspect a lot of physicians are staying on for loyalty to the community. They don't want to see the community hurt because of lack of physicians."

Myers would agree. "These are people we've worked with and lived with for years. We just can't stop seeing them."

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—Gerald Farley

Malpractice Insurance for Physician Volunteers

David E. Dines, M.D., retired early, at age 62. Now he divides his time between a home in Arizona and one in Rochester, where he lived during the years he was a pulmonary specialist at Mayo Clinic. Dines has no regrets about retiring and still maintains an active interest in his field, attending early morning conferences and medical meetings. He was heading north on a fishing trip after attending some meetings at Mayo Clinic when he spoke to *Minnesota Medicine*.

Dines talked about his "new career"—watercolor painting—joking that he doesn't earn enough as an artist to pay for his supplies. But he has a show each year, and the painting gives him a lot of satisfaction. What would also make him happy, he says, would be to spend some time volunteering as a physician. "I would love to spend a month a year helping indigent people," he says, but that's not possible without malpractice insurance.

Dines is not alone. Many physicians would like to volunteer but are deterred because they can't afford to continue their coverage during retirement. What's more, there are clinics in Minnesota, particularly in rural and inner-city areas, that can use the help of volunteer physicians.

Recognizing the need for volunteer physicians in the state, and the dilemma of retirees without insurance, the Hennepin and Ramsey county medical societies and the Minnesota Medical Association convinced the state's two major malpractice insurers to offer special coverage.

This year, Midwest Medical Insurance Company (MMIC) and The St. Paul Fire and Marine Insurance Company responded by offering inexpensive coverage to physicians who want to volunteer.

The policies, nearly identical in their terms, are available to former policyholders for \$60 a year. Coverage is limited to work performed in free or low-income clinics that have been approved by the Hennepin or Ramsey county medical societies or the MMA. Physicians may receive no remuneration for their services. There is no coverage for obstetrics (including prenatal care) or invasive procedures. The policies set a \$500,000 limit per claim, with a \$1.5 million annual aggregate.

For more information on the MMIC policy, call 612/922-5445. For information on The St. Paul Company's program, call the Hennepin County Medical Society at 612/623-3030, or the Ramsey County Medical Society at 612/291-1209.

Canby is not the only town in Minnesota faced with this dilemma. Rural Minnesota has proportionately more physicians over 55 than the rest of the state, and it also has an aging population that needs an increasing amount of medical care. "We're concerned that the number of retirements taking place in the next five years is going to leave a real dent in the supply of physicians to rural Minnesota," Terry Hill says.

Urban physicians generally don't share that concern. Earl Hill, for example, could recommend several physicians to his patients in a letter announcing his departure after 43 years in practice. The letter also gave him the chance to say goodbye. "Dear Patients," he wrote, "It is with mixed feelings that I am giving up my private practice effective March 31, 1992. I will miss you, my patients and friends—many of long years standing. On the other hand, this will leave me free to pursue other interests, some medical, some in other fields."

The letter was important, Hill says, because his patients needed time to process the news and come in and express their feelings. He likens the separation to a "mini-death" or a "mini-divorce," complete with the grief that accompanies those events.

Escaping the Old Grind

Although physicians often feel a loss when leaving their practice and patients, many also feel a sense of relief. "I was aware of some grief and sadness. I was also aware of the happy part of it—to go on with a new phase and release myself from some obligations," says Hill, adding that he especially relishes the freedom from phone calls.

David E. Dines, M.D., a pulmonary specialist who retired at 62 from Mayo Clinic, says he still dreams about his practice, patients, and residents. That pull isn't strong enough to make Dines want to return to medicine, however. "I have no desire to go back, because all I hear from young doctors is complaints about how medicine

has changed," he says. "I've seen the very best of medicine in the '50s, '60s, and '70s. Medicine has deteriorated in the '80s and '90s because of government intervention." Toward the end, Dines says he felt governed by too many regulations that determined how he could treat his patients. "That bothered me," he says. "It was things like that that precipitated my wanting to get out."

Kelly says he certainly missed his patients, who treated him like a member of the family, but he too was getting fed up with government intervention. "I did not miss all the interference coming down the pike with Medicare and Medicaid," he says. He liked medicine better when he could treat patients based on need, not cost. "I realize that's idealistic, but for many, many years ... if they could pay, fine; if not, they got the care anyway."

The Search for Fulfillment

While the move toward managed care makes it easier for many physicians to retire, the loss of patient contact is difficult for some. "I will miss the patient contact," says Smith, who still hopes to discuss interesting cases with her son and will continue her work as an assistant clinical professor at the University of Minnesota Medical School.

Stuart Lane Arey, M.D., who retired at 76 after 51 years as a pediatrician in Minneapolis, says he didn't miss his practice "one whit," but he missed "being important to people."

It's difficult for physicians to give up this feeling of importance, acknowledges the AMA's Farley. "Physicians are human also, and they revere the aspect of being important in other people's lives."

Farley frequently gets calls from retired physicians who are at loose ends. "They need something to provide a sense of self-worth." Farley advises them to think about getting involved with their favorite charities, political candi-

"I've seen the very best of medicine in the '50s, '60s, and '70s."

—David E. Dines, M.D.



dates, or civic groups. Some physicians find work as medical missionaries, and others work for low-income clinics or their churches. "We talk about what makes it worthwhile to get up in the morning."

Adjusting to a new pace can be especially challenging

"When a physician retires, he or she owes it to the patient to establish continuity with another physician."

—Robert T. Kelly, M.D.

year of retirement is marked by tension between spouses. However, if a new set of priorities is formed, the second and subsequent years of retirement can be very fulfilling."

Many find that fulfillment in volunteer work, which is a natural for physicians, according to Farley, who says that physicians' desires to feel involved in other people's lives serve them well in retirement. "That's why so many of them like to find volunteer work. It involves them in terms of fulfilling a societal need. So many of them are great volunteers."

Kelly (a past president of the MMA), for example, is president-elect of the Itasca Medical Center Foundation and a member of the governance committee to decide whether the area's hospital should be private or county-owned. He has also just been appointed by Gov. Arne Carlson to the new state Health Care Commission.

John Sanford, the Duluth surgeon, chairs the committee that oversees the rural access clinic in Cromwell. He has more time to give to other efforts, as well, including the symphony and his church. Julie Moller is teaching English as a second language to refugees.

Lack of malpractice insurance (see sidebar, page 18) has kept many physicians from volunteering in medical settings. But some, like Thomas P. Coleman, M.D., continue to practice medicine in retirement.

early in retirement, says Robert Veninga, Ph.D., professor in the Division of Health, Management, and Policy in the School of Public Health, University of Minnesota (see Face to Face interview, page 7). Veninga, who recently published a book on retirement, "Your Renaissance Years: Making Retirement the Best Years of Your Life," says the first year can be rocky.

"Frequently, the first

Coleman, an orthopedic surgeon, practiced for many years in Cambridge, Minnesota, and also in Ethiopia and Cameroon with a Baptist missionary group. Since his retirement in 1988, he and his wife, who is a nurse, have made several trips to Cameroon. This year they spent more than four months working at the Mbingo Baptist Hospital and the Banso Baptist Hospital. Malpractice doesn't concern Coleman because it's not an issue with the Cameroonians. "They're very grateful for any help they can get," he says. What's more, Coleman is grateful for the opportunity to teach young Cameroonian physicians, who don't receive clinical training in school. Coleman, who is 70, says he and his wife hope to volunteer "as long as we're able to navigate. ... This is no big deal. We do it because we enjoy it."

The Secret to Successful Retirement

Enjoyment is a key factor to a successful retirement, according to Veninga. "The happiest people I interviewed were individuals who reported that they were busier in retirement than they were in their careers. The key factor is that they're doing things they enjoy and never fully had enough time to engage in."

There are other keys to a successful retirement, Veninga says. One, people have to retire to something. "They should not be trying to get away from a difficult job or poor work experience, as much as they are looking forward to doing something with their time." And two, retirees need a network of friends—a social support system—to fall back on.

Veninga is very optimistic about the retirement of physicians because they generally have a lot of social contacts and often have avocations that they haven't had time to fulfill. "Retirement would give them ample opportunity to realize their hobbies and dreams," he says.

Nadine Smith is a case in point. "I've had a wonderful life in medicine," she says. But she has many things to look forward to in retirement, including spending more time in her vegetable garden, hiking in the mountains, skiing, and perhaps returning to school to study American history and French. "I'm certainly not going to go into a depression," she says, adding that she knows a lot of physicians who do. "But they haven't had enough interests outside their practice," she says. Smith simply plans to refocus her energy. "I tend to be a gung-ho person, and I will just put as much enthusiasm into the next decade of my life as I have the past 40 years."

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Miriam Feldman is a Minneapolis free-lance writer.



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Examples:

1. Benson RC Jr. Laser photodynamic therapy for bladder cancer. *Mayo Clinic Proc* 1986;61:859-64.
2. Guttormson NL, Bubrick MP. Mortality from ischemic colitis. *Dis Colon & Rectum*, to be published.
3. Chatterjee SN. Use of GOR-TEX grafts as vascular access procedure for chronic hemodialysis. Abstract of a paper submitted to the European Society for Artificial Organs Eighth Annual Meeting, Copenhagen, August, 1981.
4. Thompson NW. Thyroid and parathyroid. In: Welch KJ, Randolph JG, Ravitch MM, et al., eds. *Pediatric Surgery*, 4th ed. Chicago: Year Book Medical, 1986: vol 1, 522-33.

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The Minnesota Fatal Accident Circumstances and Epidemiology Study

Surveillance of Occupational Fatalities

Georjean Madery-Wygonik, M.S., Jack Brondum, D.V.M., M.S., and David Parker, M.D., M.P.H.

ABSTRACT

This report describes the Minnesota Fatal Accident Circumstances and Epidemiology Study (MN FACE), a new federally funded initiative to study fatal injuries in the workplace. Its primary objective is to reduce occupational fatalities. Fatalities due to falls, electrocutions, and asphyxiation caused by entry into confined spaces are currently investigated in Minnesota. MN FACE determines risk factors associated with fatalities then develops interventions for their mitigation or elimination. A comprehensive, statewide surveillance system, including state agencies, associations, organized labor, and industry, has been established to reduce the amount of bias in reporting.

As part of a nationwide initiative sponsored by the National Institute for Occupational Safety and Health (NIOSH), the Minnesota Department of Health recently received a federal grant to study fatal injuries in the workplace. The initiative is called Minnesota Fatal Accident Circumstances and Epidemiology, or MN FACE. NIOSH, of the Centers for Disease Control, established the national FACE program in 1982 to provide technical assistance for the investigation and development of information on risk factors for occupational fatalities. The FACE program has been called an "exemplary epidemiologic model for the detailed follow-up and assessment of causal factors that result in fatal occupational injuries."¹ FACE is strictly involved in research and has no regulatory or enforcement responsibilities. In October 1991, NIOSH awarded cooperative agreements to the Minnesota Department of Health and public health agencies in eight other states.

The primary objective of the FACE program is to achieve a measurable reduction in occupational fatalities. The program currently has detailed epidemiologic investigation protocols for deaths from falls, electrocutions, and asphyxiation caused by entry into confined spaces, and these three types of fatalities are currently investigated in Minnesota. The study's major objective is to reduce such fatalities by identifying the risk factors associated with their occurrence. These risk factors can then be mitigated or eliminated. Another objective is to establish a standard investigative procedure and data collection method for fatal occupational injuries throughout the United States. FACE data may also allow validation of fatality information

collected from other sources, such as workers' compensation records and Bureau of Labor Statistics surveys.

The Minnesota Department of Health (MDH) calculated average incidence rates for traumatic occupational fatalities in Minnesota for the years 1983 through 1989, based on the Minnesota Department of Labor and Industry's first report of injury records. Fatalities due to heart attacks and vehicular accidents, as well as workers' compensation denials, were not included in these estimates. Of the remaining fatalities, approximately 22 percent were not classified due to missing death data observations, and these, too, were dropped from analysis.

High-risk industries for Minnesota workers included construction (21 deaths per 100,000 construction workers), mining (11/100,000), and transportation (10/100,000) (Figure 1). The construction industry fatality rate was 3.3 times greater than the all-industry average rate of 6.2/100,000. The mining and transportation industry rates were both approximately twice the average rate.

The MDH also analyzed Minnesota deaths by occupation (Figure 2). Because of a change in the coding and recording of occupations, only incidence rates for the years 1986, 1988, and 1989 were used, but a similar risk pattern is evident. Laborers, craftsmen, and operators, all part of the construction and production industry, had incidence rates of 9.5/100,000, 7.9/100,000, and 4.2/100,000, respectively. The average incidence rate for all occupations analyzed for those three years was 3.6/100,000.

An ongoing problem for surveillance of fatal incidents is the absence of any single source of uniformly collected data on such events. Avail-

able data are collected in many different ways utilizing multiple formats, none of which can be considered definitive. Institutions report varying statistics for the number of annual occupational fatalities. The Bureau of Labor Statistics reports that 3,740 persons die of occupational injuries in the United States each year, while the National Traumatic Fatalities database reports 7,000 occupational fatalities, and the National Safety Council reports

11,000.^{2,3} The wide range in annual fatality estimates clearly demonstrates the problem of ascertaining occupational fatality rates. Fatality estimates can vary because of differing definitions and ascertainment methods, problems in case recognition, and inaccurate or incomplete reporting. For certain industries and workplaces, case reporting introduces additional problems. For example, fatalities in offshore fishing, certain fatalities on farms, and work-related deaths in small,

privately held firms may not be captured by existing reporting systems or recognized as occupational fatalities.⁴

The Center for Health Statistics at the Minnesota Department of Health reports that between 30 and 70 occupational fatalities have occurred per year since 1980 in Minnesota.⁵ However, not all of these fatalities were traumatic. In contrast, for the years 1983 through 1989, first report of injury records from the Department of Labor and Industry report between 79 and 118 annual occupational fatalities.⁶

MN FACE must gather data of the best possible quality. Risk-factor determination based on poor-quality or incomplete data is unlikely to be meaningful. To this end, timely investigations of fatalities reported to MN FACE will be carried out to minimize information loss. A comprehensive, statewide surveillance system to minimize the amount of bias in reporting is also crucial and will be established. The Minnesota Department of Health is working closely with a number of agencies, organizations, and interested groups in the state to obtain information on as many fatalities as possible in the three categories under investigation. The effort includes the Department of Labor and Industry, the Minnesota Occupational Safety and Health Administration, the Minnesota Association of Coroners and Medical Examiners, the state Association of Funeral Directors, emergency medical service providers, municipal officials, state and local law enforcement officials, representatives of organized labor and industry, and others.

Coroners and medical examiners can be of particular help to MN FACE investigators by ensuring that the underlying and all contributing causes of death are listed on death certificates. The information listed should include the decedent's occupation and industry and whether or not the death occurred on the job.

The number of cases reported annually in any one state may be too small to allow meaningful statistical analysis to be performed or inferences to be made. Aggregation of standardized data at NIOSH should facilitate both. The national FACE pro-

Figure 1. Minnesota traumatic occupational fatalities, 1983-1989; industry incidence rate.

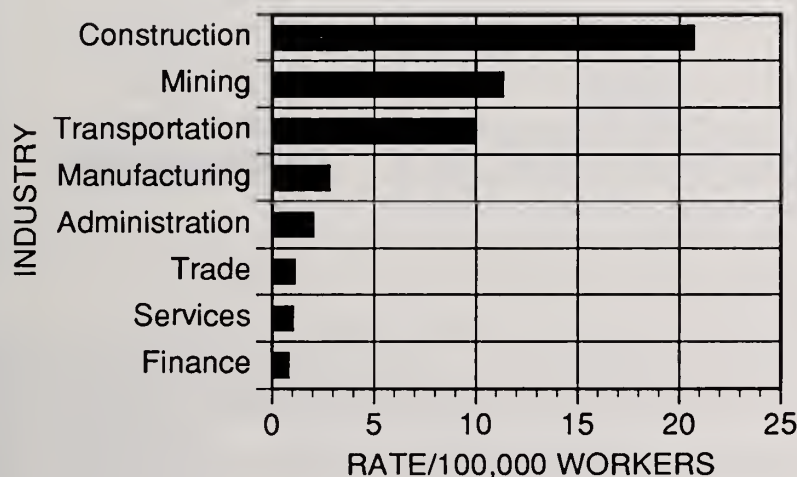
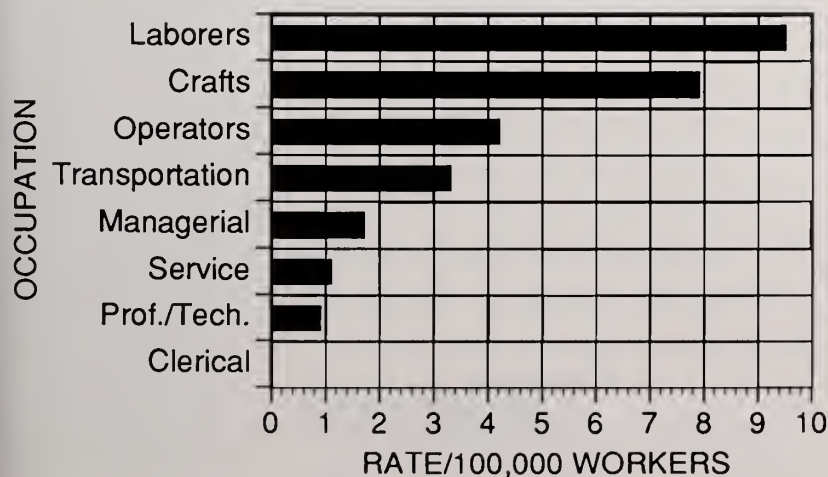


Figure 2. Minnesota traumatic occupational fatalities, 1986, 1988, & 1989; occupational incidence rate.



gram at NIOSH will identify risk factors for each type of fatality and set priorities. The occurrence of such fatalities in the future can then be reduced by designing and implementing appropriate interventions.

While research is the primary purpose of MN FACE, education is also an important goal. The MN FACE educational component consists of outreach, referral, information dissemination, and intervention. MN FACE staff are available to the Minnesota public to speak about the study or to discuss concerns people may have about fatal occupational injuries. MN FACE will disseminate safety literature, investigation reports, and other information regarding occupational fatality risk factors and interventions to targeted occupational groups, such as utility and construction workers.

To increase awareness of statewide MN FACE activities and to encourage timely reporting of occupational fatalities, introductory letters and wall placards were sent to the groups involved in MN FACE surveillance. A toll-free number (800/759-FACE) is now available for reporting occupational fatalities to the MN FACE office from anywhere in Minnesota or the surrounding five-state area. News releases explaining the purpose and scope of the MN FACE study have been sent to labor newspapers and selected union newsletters. The success of MN FACE is directly related to the public's awareness of its activities. We urge members of Minnesota's medical community to bear MN FACE in mind in their daily work routines.

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Georjean Madery-Wygonik and David Parker are with the Minnesota Department of Health, Section of Chronic Disease and Environmental Epidemiology. Jack Brondum was formerly with the Minnesota Department of Health and is now an independent consultant.

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REFERENCES

1. Hanrahan LP, Moll M. Injury surveillance. *Am J Public Health* 1989; 79(12)(Suppl):38-45.
2. Stout-Wiegand N. Fatal occupational injuries in U.S. industries, 1984: a comparison of two national surveillance systems. *Am J Public Health* 1988;78(9):1215-7.
3. Bell CA, Stout NA, Bender TR, et al. Fatal occupational injuries in the United States, 1980 through 1985. *JAMA* 1990; 263(22):3047-50.
4. Hanrahan LP, Higgins D, Haskins L, Anderson H. Project FACE: Wisconsin surveillance of fatal occupational injuries. *Wis Med J* 1992;91(1):43-5.
5. Minnesota Center for Health Statistics, Minnesota Department of Health. Minnesota Health Statistics, 1980-1989 (10 volumes). Minneapolis: MDH, 1980-1989.
6. Kimpan K. Minnesota Department of Labor and Industry. Personal communication, 1992.

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The Patient Self-Determination Act

Advance Directives Available to Minnesota Patients

Daniel J. McInerney, Jr., J.D.

The Patient Self-Determination Act (PSDA), a federal law that went into effect December 1, 1991, requires certain health care providers to notify patients of their right to refuse medical care and their right to prepare advance directives specifying their wishes regarding medical care should they become incompetent. This article discusses the advance directives available to Minnesota patients.

Patient Self-Determination Act

Despite the clear existence of individuals' rights to specify their wishes concerning medical care, Congress enacted the PSDA because it perceived that relatively few patients act on those rights. The result is often confusion, conflict, and litigation when questions arise concerning the medical care of a patient who has not prepared an advance directive and who is no longer competent. The evidence seems to support Congress's perception, if not the legislation itself. Despite the widespread existence of statutes recognizing advance directives, few people have executed such documents. For example, a recent poll conducted by the Minneapolis-based *Star Tribune* shows that although nearly 90 percent of adult Minnesotans believe Minnesota's Living Will Act is a good idea (a living will is one type of advance directive), only 13 percent had executed such a document. Congress passed the PSDA to ensure that patients understand their legal rights and to encourage them to express their desires about health care in writing. Whether the PSDA will increase the number of advance directives is not entirely clear. Nonetheless, the PSDA is law, and the provider community must deal with both the law and patient responses to it.

The PSDA applies to all hospitals, skilled nursing facilities, prepaid health care organizations, hospice programs, and home health agencies that participate in either Medicare or Medicaid. It requires these organizations to:

- supply each patient with written information that describes the patient's rights under state law to

“An attorney-in-fact
can more efficiently
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anticipated in a
living will.”

accept or refuse medical treatment and to make an advance directive, as well as the provider's policy for implementing those rights;

- document in the patient's medical record whether or not the patient has executed an advance directive;
- comply with state law regarding advance directives;
- not discriminate against an individual, whether in the provision of care or otherwise, regardless of whether that person has executed an advance directive; and
- educate staff and community about advance directives.

Providers who do not comply with these requirements face administrative sanctions and even decertification from participation in Medicare or Medicaid. In addition, the PSDA's requirements have been

incorporated into the new Patient Rights Standards of the Joint Commission on Accreditation of Healthcare Organizations; consequently, the accreditation status of providers who do not comply with the requirements could be compromised.

Physicians and the PSDA

Neither the PSDA nor the Department of Health and Human Services' related regulations affect patients' legal rights, including the right to informed consent and the constitutional right to refuse treatment. Similarly, the PSDA does not impose any legal obligations upon physicians.

Nonetheless, physicians will clearly be affected since many health care facilities subject to the PSDA are suggesting that patients discuss their rights with their physicians. This suggestion, which is consistent both with medical custom and the law of informed consent, may very well increase physician-patient communication about patients' rights to make advance directives. Some knowledge of these rights will help physicians respond to patients' questions.

The Patient's Right to Refuse Treatment

Under common law (judge-made law, as distinct from statutory law, which is made by the Legislature), Minnesota patients have rights to autonomy and self-determination requiring physicians to gain informed consent before treatment (emergency circumstances are a notable exception to this rule) and to respect a patient's refusal to accept treatment. Statutes like the Patient Bill of Rights, which applies to inpatients, nursing home residents, and mental health outpatients, express this principle of au-

onomy as well. Physicians who fail to respect these rights are subject to liability for damages for battery or negligence.

State and federal constitutional law also recognizes the right of a competent patient to refuse medical care. For example, these constitutional rights can come into play when a government-owned hospital and a patient disagree over whether the patient must consent to a certain treatment. These rights can also be raised when a private hospital disagrees with a patient's request to terminate life-sustaining treatment and one or both parties turn to a court to resolve the dispute. In *Cruzan*, the leading federal constitutional case, the U.S. Supreme Court held that a patient's right to liberty, as expressed by the 14th Amendment to the U.S. Constitution, encompasses the right to refuse medical treatment. The leading Minnesota cases, the *Torres* and *Jarvis* cases, reached similar conclusions, although ex-

pressed in Minnesota; most frequently, the laws permit a proxy to be designated to speak on behalf of the formerly competent patient. These techniques involve the appointment of a guardian (sometimes at the patient's direction) or the patient's execution of some form of advance directive—typically, either a living will or, arguably, a “durable power of attorney” for health care decisions, or both.*

The Living Will and Durable Power of Attorney

The living will is the form of advance directive most likely to be encountered in general medical practice. A living will is a written expression of an individual's specific wishes for medical treatment should the individual become incompetent and terminally ill. The individual can designate a proxy decision maker in a living will but is not required to do so. Providers must follow the instructions in the living will to the fullest extent possible, consistent with reasonable medical practice and the law; however, if uncomfortable with the patient's wishes, a provider may transfer the patient to another provider.

In general, the durable power of attorney for health care decisions, less commonly used in Minnesota than the living will, allows an individual (the “grantor”) to delegate authority to a proxy called an “attorney-in-fact” to make decisions for

the grantor. These decisions must be prudently made in good faith and with the grantor's best interests in mind. The power is “durable” because it continues even if the grantor becomes incompetent; in fact, a durable power of attorney for health care is typically drafted to take effect only when the grantor becomes incompetent. Unlike a living will, the durable power of attorney is not limited to situations in which a patient is terminally ill, nor does it require the individual to anticipate his or her future medical condition and decide about treatment in advance. Instead, guided by the patient's wish-

“A proxy can extend
the effective reach
of a patient's
self-determination.”

“No living will can
address the full range
of diagnoses and
therapeutic options
that might arise.”

pressed in terms of our state constitution's right to privacy. Although some circumstances might exist in which a particular policy interest of the state overrides a patient's right to refuse medical care, government must generally respect these constitutional rights.

Both the *Cruzan* and *Jarvis* courts held that incompetent persons are also entitled to have this right asserted on their behalf. Current interpretations of both federal and state constitutions, however, do not specify how or by whom this right might be exercised on behalf of non-institutionalized, mentally incapacitated patients. However, statutory and common law do prescribe several ways an incompetent patient's right to refuse treatment might be

es and best interests and informed about the patient's medical condition, the attorney-in-fact can decide about treatment as medical circumstances arise and change.

Some confusion exists about the validity of the durable power of attorney for health care decisions in Minnesota. Because of this confusion, I will discuss this type of advance directive in some detail.

Minnesota's durable power of attorney statute enables the attorney-in-fact to make all manner of decisions on the grantor's behalf—decisions ranging from the sale of property to operating a business. However, the statute does not specifically mention health care decisions (as some state statutes do), and Minnesota courts have not specifically addressed whether this general statute supports the durable power of attorney for health care decisions.

One view holds that this statute does not authorize durable powers of attorney for health care decisions. Proponents of this view argue that the durable power of attorney statute focuses on economic, not personal, decisions. They conclude that the Legislature has identified only two

*Medical care decision making on behalf of a person who has been involuntarily committed to the care of the state is governed by specific statutory and judicial procedures, as is the application of “intrusive” therapies (e.g., psychosurgery, electroconvulsive therapy) to mentally ill persons, whether or not they are under care of the state. These procedures apply to a relatively narrow category of patients so they are not discussed in this article. Similarly, because guardianship requires judicial supervision, and guardianship law applies to matters much broader than medical care decision making, the use of guardianship is not discussed here in detail.

permissible routes to proxy medical care decision making on behalf of formerly competent patients—a guardianship or a living will. Such arguments are not entirely without merit, but a number of attorneys believe that health care durable powers of attorney are valid in Minnesota and may be honored by physicians.

Existing law provides considerable support for this conclusion. First, the *Cruzan* case suggests that a competent patient has the constitutional right to appoint a health care proxy. Second, the Minnesota statute authorizing durable powers of attorney does not specifically rule out health care decisions. Courts in several states have ruled that, even in the absence of a specific reference to health care decisions, a general durable power of attorney statute is sufficient to appoint a health care proxy as attorney-in-fact. Third, the Patient Bill of Rights recognizes a patient's right to appoint a proxy to gather information about medical care and to enforce the patient's rights, including the right to refuse care. These rights are not limited to situations in which the patient is terminally ill, and the statute plainly assumes that the proxy has been given advance direction. Fourth, the *Torres* case, which suggests that neither a court order nor a guardian is necessary for family members to make decisions regarding medical care on behalf of an incompetent patient, implicitly supports the validity of durable powers of attorney for health care decisions. If family members not appointed as proxies by the patient can make such decisions, surely attorneys-in-fact specifically named by the patient can also represent the patient's wishes. Finally, the Living Will Act, passed after *Torres*, specifies that living wills are not the only technique available for executing advance directives. The act states that it is not intended to impair or supersede existing rights, which would presumably include rights existing under the durable power of attorney law, the Patient Bill of Rights, and *Torres*.

Patients and providers may both prefer a durable power of attorney over a living will, either standing

alone or in conjunction with a living will. An attorney-in-fact can more efficiently reach treatment decisions, especially in situations not anticipated in a living will or when the patient is mentally incapacitated but not terminally ill. Appointing an attorney-in-fact avoids the difficulty, inherent

“Patients and providers may both prefer a durable power of attorney over a living will.”

in living wills, of trying to anticipate medical circumstances and treatment choices before the onset of illness. No living will can address the full range of diagnoses and therapeutic options that might arise.

A carefully chosen and trusted proxy can ask questions, assess risks and burdens, speak to the patient's friends and relatives, consider a variety of therapeutic options, seek the opinions of other physicians, and evaluate the patient's condition and prospects for recovery. In short, the proxy would engage in the same complex decision-making process that the patient would undertake if he or she were competent. Thus, a proxy can extend the effective reach of a patient's self-determination by making decisions consistent with the patient's values and wishes in medical circumstances that the patient could not have foreseen.

Summary

The Patient Self-Determination Act requires most health care institutions to inform patients of their right to refuse medical care and their right to provide advance direction regarding their wishes should they become incompetent. Although the PSDA does not apply to physicians, it will probably increase the demand for communication with patients on such matters. Patients will undoubtedly ask how to formulate advance directives. While physicians should make

it clear that they are not providing legal advice to patients on such issues, they may wish to indicate that a guardianship and a living will are options available under Minnesota law. Additionally, as indicated above, a number of arguments exist that durable powers of attorney for health care are valid in Minnesota, as well. Physicians should familiarize themselves with living will forms and may wish to make them available to patients upon request. (Living will forms can be obtained by contacting the Minnesota Medical Association at 612/378-1875.) Patients with questions regarding durable powers of attorney should be advised to seek legal counsel. **MM**

This article discusses general legal principles; it is not legal advice. For legal advice, consult qualified legal counsel.

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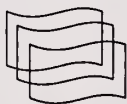
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Bond Funds

The Good, the Bad, and the Ugly

David M. Carlson, Ph.D.

An avalanche of investor dollars tumbled into bond funds of all types during the last decade. By the end of 1990, bond and income funds were nearly one-third larger in size than stock funds. Several factors apparently led to this growth: rapidly falling interest rates, aggressive marketing, and unfortunately, the failure of too many investors to understand why and what they were buying.

The Good

Bond funds offer a number of positive features for certain investors. For example, they may be the only way someone with small amounts of money can buy bonds. Some individual bonds, for instance, require minimum purchases of \$5,000. Many fine bond funds, however, require only \$500 or \$1,000 to get started.

Another plus is diversification. A good bond portfolio should hold a number of high-quality issues and maturities. Small investors, however, may not have sufficient funds to build a well-diversified portfolio of individual bonds on their own. By investing in such a bond fund, they overcome this problem by owning a pro-rata share of a large diversified portfolio.

Bond funds also provide professional management. Investors should benefit from this expertise. They will be relieved of buy/sell decisions and, in any case, won't have to shop for individual bonds themselves. Bond funds are also easy to use. Many provide excellent reports and have plans that make it easy to reinvest earnings and small contributions.

Finally, most reputable bond mutual funds provide accurate performance information. They report the manager's actual results, in contrast to the "model portfolio" or

"hypothetical" performance numbers touted by some investment advisers.

The Bad and the Ugly

Bond funds have certain drawbacks, as well. Since few sales persons dwell

"Bond fund investors are actually buying stock in a constantly changing portfolio of bonds."

on the shortcomings of the products they sell, I will spend a bit more time explaining some significant problem areas.

Sales loads and management fees

Front-end sales charges of up to 5 percent and redemption fees up to 0.75 percent are not uncommon among bond funds. These fees are in addition to ongoing management fees that frequently exceed 1 percent per year. Now, with annual yields below 7.5 percent (10-year U.S. Treasury Note = 7.2 percent as of June 29, 1992), an investor would use most of the interest earnings just to pay those hefty first-year fees.

Failure to understand objectives and guidelines

In the mid-1980s, buyers flocked to the Shearson Government Securities fund (called the Hutton Government Securities Series at that time), evidently believing it to be as solid as the U.S. government itself. By 1986, the fund had over \$6 billion in assets. The next year, after the fund delivered a -6 percent return, investors

began fleeing in droves, eventually taking nearly \$5 billion with them.

What the buyers failed to notice was that the fund not only had high expenses, but also featured one of the longest average maturities around, making it extremely volatile. Volatility and government securities turned out to be an unacceptable combination for these misplaced souls.¹

The yield chase

When interest rates began falling precipitously back in the early 1980s (and again recently), bond investors began to shop for high yields to replace those they were giving up as their older bonds and CDs matured. In order to do this, they took on additional risk, frequently unwittingly so.

A particularly telling example is the Dean Witter High-Yield Securities fund. By June 1989, the fund had accumulated \$2.3 billion in assets. At the end of 1991, however, it was down to \$425 million—a decline in assets of 82 percent from its peak. What happened? Well, the fund surprised its holders with a -40.13 percent return in 1990. Investors couldn't wait to get out the door. In their clamor for yield, they had forgotten the fundamental investment principle that high return is usually accompanied by high risk. They didn't have to wait long to be reminded.²

Timing the bond market

One of the least rewarding strategies is attempting to time the bond market. Timers try to buy bonds in anticipation of falling interest rates and then attempt to sell them before rates rise. The problem with this approach is that it doesn't work; better said, no mortal seems able to do it successfully over meaningful periods of time.

For example, Mark Hulbert, who

tracks a number of bond timers for his *Hulbert Financial Digest*, noted that of the seven bond timing services he had followed since 1986, not one generated better results than a simple "buy-and-hold" strategy. One of the timers actually managed to achieve a compound annual loss of -1.1 percent, while the U.S. Treasury bond market itself provided a +9.4 percent annual return! These results occurred over five and one-half years. Over a three-year period, not one of the 20 bond-timing services Hulbert analyzed outperformed the bond market.³

The reason for this difficulty should be apparent. Movements in interest rates are influenced and frequently determined by arbitrary forces that are themselves unpredictable, such as shifts in Federal Reserve policy. Is the Fed going to ease rates, tighten, or stay the course? No one knows in advance. Even its directors don't know until after their meetings. No wonder Hulbert calls bond market timing a "fool's game."

Forgetting what bonds are for

Individual high-quality bonds have two distinctive attributes: 1) they return your money on a maturity date known at the time you buy them, and 2) they pay you a fixed rate of interest while you wait. Bond fund investors, however, give up both of these attributes. In effect, they are actually buying stock in a constantly changing portfolio of bonds. In addition to fluctuating bond values caused by changing interest rates (which affects both individual bonds and bond funds), fund shareholders must also weather the impact of withdrawals and contributions by others, plus the turnover of holdings by the fund managers themselves.

Portfolio turnover can be very high. According to Mutual Fund Values, even among U.S. government bond funds, which one might think would be stable to the point of boredom, the average government bond fund turned over its portfolio nearly twice (191 percent) in 1991 alone.⁴ Bonds used to be called "fixed income securities," but little is "fixed" in these funds, other than perhaps the name of the fund itself.

A Better Way

So what is a bond investor to do? If you have a fair sum of money to commit (over \$50,000, say), buy individual, high-quality bonds. (Leave the junk and Ouija-board bond games to the pros.) Keep the bonds you buy 10 years or less to maturity. (Evidence suggests that intermediate-term bonds have outperformed longer ones by a considerable margin over long time periods, and with much less volatility.) And forget trying to time the market.

Allocate your bond dollars across a 10-year maturity schedule (with equal dollar amounts invested in each of the 10 years, if you can; if not, every other year will do nicely). Once this "ladder" is in place, leave it alone, except for adding to existing or missing rungs as bonds mature and as interest and new money become available for investment. Or, if you don't want to do this yourself, hire a money manager who follows this strategy precisely. (Such a manager can often add value by purchasing better bonds more economically than an individual investor through careful analysis and shopping the market.)

What if you don't have \$50,000 or more to invest? Then you might have to use a bond fund. If so, find one with low sales charges and annual expenses. Be sure it follows a sensible strategy (i.e., high-quality, intermediate-term bonds, no timing). After you invest in a suitable bond fund, you must monitor it regularly to be sure it isn't changing managers, strategy, or both. All too many do over time, often because of intense performance pressures having little or nothing to do with your objectives. Finally, check your account statements carefully!

Individual bonds and bond funds can be great investments. But like most things, you must first understand what you are buying, and it must be appropriate for your particular circumstances. Permit me to paraphrase an old saw applied to your profession that seems to fit the investment field well: an ounce of prevention (in this case, homework prior to purchase) is worth pounds of

cure. Satisfied bond investors will tell you this is so, as will a number of other less diligent investors who are still recovering from their unhappy experiences. MM

David M. Carlson, Ph.D., has over 13 years of professional investment experience and is a principal/founder of Compass Capital Management, Inc., in Minneapolis. Prior to the formation of Compass in 1988, he was vice president and senior portfolio manager at Norwest Investment Management and a registered representative with Piper, Jaffray and Hopwood. Before that, he served as representative of the Board of Pensions of the Lutheran Church in America. He is a member of the Twin Cities Society of Security Analysts, Inc.

NOTES

1. For more information about this fund, see: Phillips D, editor. Sinking Ships. Mutual Fund Values (Summary) 1991 Feb 8:2.
2. Mutual Fund Values 1992 Feb 21.
3. Hulbert M. A Fool's Game. Forbes 1991 Aug 5:119.
4. Mutual Fund Values 1992 March 6.



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▲ Mailing Lists

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MMSC 612-378-0305
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▲ Legal Services Resource List/ Management Consulting Resource List

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MMSC 612-378-0305
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OSHA-required universal precautions training material and the OSHA Compliance Manual for Blood-borne Pathogens are available to MMA members at a discounted price from Medcom, Inc. The training program video is \$75 and includes one workbook; additional workbooks are \$5. The compliance manual is \$79. When calling, identify yourself as an MMA member.
Medcom, Inc. 1-800-877-1443

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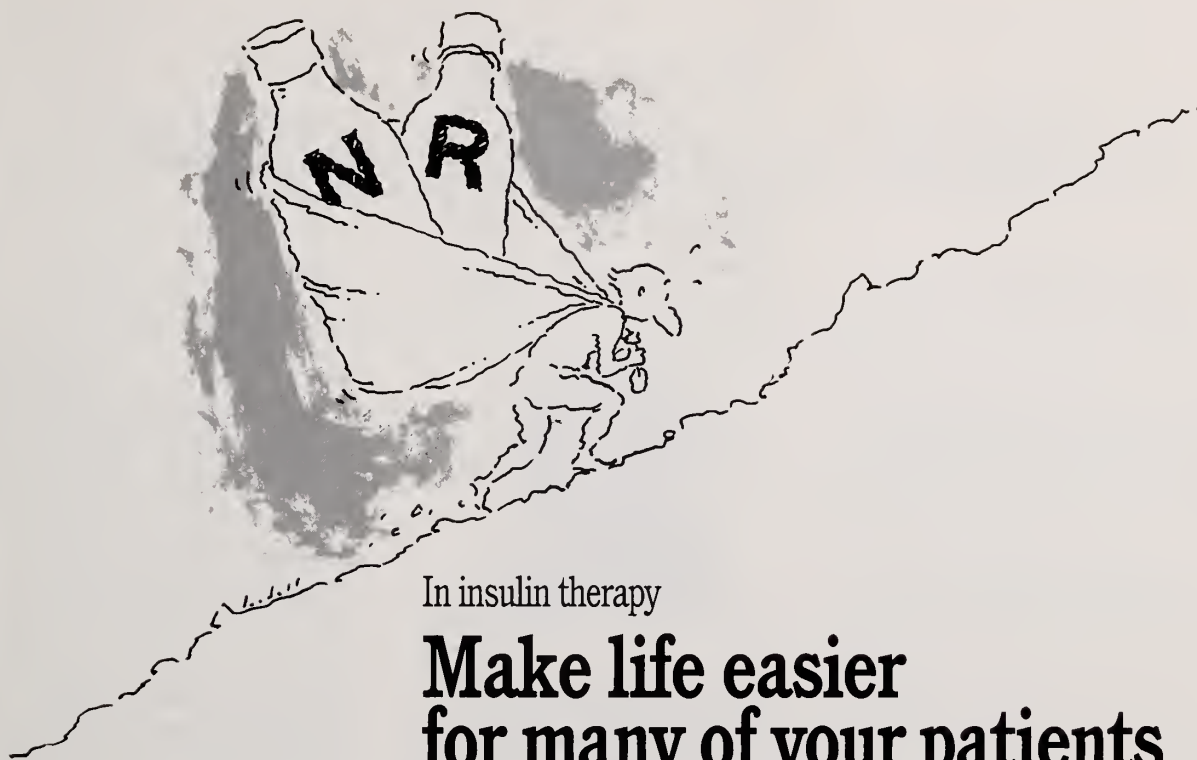
▲ HCFA - 1500 Forms

The newly-implemented HCFA-1500 forms for physician claims to Medicare, Medical Assistance, and commercial insurance companies are available at reasonable prices from SMS Holdings Corporation, a component of the State Medical Society of Wisconsin.
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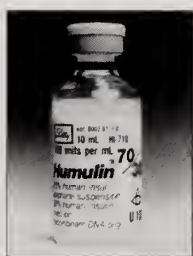




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In Memoriam

Jerome J. Ballantine, M.D.
Indiana University, 1956
 Born: 1932, Died: May 9, 1992



John D. Banovetz, M.D.
University of Minnesota, 1959
 Born: 1934, Died: Jan. 7, 1992



George S. Bergh, Sr., M.D.
University of Minnesota, 1933
 Born: 1908, Died: April 17, 1992



Allan J. Blake, M.D.
Marquette University, 1943
 Born: 1916, Died: June 30, 1992



Arthur H. Borgerson, M.D.
Northwestern University, 1927
 Born: 1902, Died: March 7, 1992



James C. Cain, M.D.
University of Texas, 1937
 Born: 1913, Died: Feb. 1, 1992



James J. Coll, M.D.
Jefferson Medical College, 1939
 Born: 1914, Died: Feb. 3, 1992



Heinrich A. Dierker, M.D.
University of Berlin, 1938
 Born: 1912, Died: March 21, 1992



Charles W. Field, M.D.
University of Rochester, 1946
 Born: 1921, Died: March 24, 1992



Carl J. Fritsche, M.D.
Northwestern University, 1930
 Born: 1904, Died: Dec. 23, 1991



William G. Halverson, M.D.
University of Minnesota, 1953
 Born: 1926, Died: Feb. 23, 1992



Leon D. Harris, M.D.
University of Minnesota, 1938
 Born: 1909, Died: Dec. 3, 1991



Willis L. Herbert, M.D.
Creighton University, 1929
 Born: 1902, Died: May 5, 1992



Wallace E. Herrell, M.D.
University of Virginia, 1933
 Born: 1909, Died: April 7, 1992



Charles W. Jarvis, M.D.
University of Minnesota, 1946
 Born: 1920, Died: March 12, 1992



Karl E. Johnson, M.D.
University of Minnesota, 1938
 Born: 1909, Died: March 2, 1992



John F. Kelly, M.D.
University of Minnesota, 1940
 Born: 1913, Died: Jan. 23, 1992



Elliot M. Latts, M.D.
University of Minnesota, 1951
 Born: 1924, Died: Feb. 14, 1992



Paul H. Lober, M.D.
University of Minnesota, 1944
 Born: 1919, Died: March 26, 1992



Albert D. Mattson, M.D.
University of Minnesota, 1940
 Born: 1913, Died: Feb. 27, 1992



Robert F. McGandy, M.D.
University of Minnesota, 1924
 Born: 1898, Died: June 18, 1992



Charles A. Mock, M.D.
Harvard Medical School, 1942
 Born: 1917, Died: April 1992



Robert B. Potter, M.D.
University of Minnesota, 1937
 Born: 1913, Died: Dec. 24, 1991



Sylvester J. Raetz, M.D.
Marquette University, 1937
 Born: 1909, Died: April 30, 1992



Ronald E. Risch, M.D.
University of Minnesota, 1936
 Born: 1910, Died: June 14, 1992



Charles E. Robinson, M.D.
Cornell University, 1939
 Born: 1915, Died: March 18, 1992



Robert M. Salassa, M.D.
Indiana University, 1939
 Born: 1914, Died: March 27, 1992



Arthur C. Skjold, M.D.
University of Minnesota, 1930
 Born: 1901, Died: March 28, 1992



Thorsten Smith, M.D.
University of Minnesota, 1934
 Born: 1908, Died: March 19, 1992



Federico Soriano, M.D.
University of Hamberg, Germany, '60
 Born: 1923, Died: April 3, 1992



Alf K. Stratte, M.D.
University of Minnesota, 1924
 Born: 1896, Died: Nov. 12, 1991



Eugen W. Urbanyi, M.D.
St. Elizabeth University, Hungary, 1927
 Born: 1902, Died: June 26, 1992



Carl E. Vorbes, M.D.
University of Iowa, 1951
 Born: 1925, Died: Feb. 3, 1992



Physicians Should Manage the Care They Provide

Thomas A. Stolee, M.D.

Recently, the 34th anniversary of my medical school graduation passed. During those years, technological advances in medicine have been astounding. These advances allowed many people with chronic renal disease, cancer, coronary artery disease, and numerous other serious conditions to live longer, more fruitful lives. Even medicine's critics can't deny these successes. However, we must agree with those who express major concern about the economic impact of these advances. We must actively assist those who want to bring about realistic reform.

Passage of the HealthRight bill this spring was clearly the act of a frustrated society. Unfortunately, unless changed, HealthRight will create more problems than it will solve. The MMA is dedicated to working with the state administration and Legislature to bring about a workable solution, and we are currently doing so. Let's consider HealthRight a symptom of a diagnosable disease and attempt to treat it. In order to do so, I'd like to broaden the picture.

Health care costs must be controlled without sacrificing quality. Therefore, health care must be managed. The only question that remains is this: Who does the managing? I see four possibilities.

First of all, governments, as the major purchasers of health care, see themselves as inherently involved in managing it. (The many federal and state health care reform proposals are well covered by the press and will not be reviewed here.) Clearly, government management of our health care system would entail supply-side economic rationing and could well be detrimental to patient care. Most government authorities and legislators frankly do not prefer



"Health care must be managed, but who does the managing?"

this approach unless they are forced into it by public pressure.

Second, insurance companies and health care management firms are now actively managing patient care through various types of utilization review and cost-control efforts. These groups are making great profits, and I feel those funds could be better used in providing patient care. The middleman has become too powerful. The so-called payers are controlling much of health care in this country. I know I'm going to raise a few eyebrows with this statement, but it escapes me why control of our patients' health care by large corporations is preferable to government control of that care. Better alternatives exist.

Third, the American Hospital Association has a proposal for horizontally integrating services at the hospital level that would make physicians an apparently insignificant part of a system controlled by the hospitals. Physicians are not even mentioned in the latest AHA Patient Bill of Rights; we are lumped together with others as "caregivers."

Finally, I have a vision of a horizontal integration, too. I see physi-

cians integrating their services in order to manage health care. Large clinics already do this to varying degrees. If health care is to be managed, as it must, why not by those who are trained to do so? Why can't we, as the providers of care, negotiate directly with the consumers of care? Before the development of health insurance, this was the standard, albeit on an individual basis. I envision a community-wide or county-wide integration of services that allows for reasonable, cost-effective management; eliminates duplication of equipment and services; maximizes quality improvement; and minimizes costs. Some have called this model a "clinic without walls," and, of course, it creates antitrust complications that must be addressed.

As I see it, and others have suggested, organized medicine could work with hospital associations to establish and improve models of horizontal and vertical integration. The Hennepin County Medical Society, for one, has done much to explore these concepts. Additionally, in June, the AMA House of Delegates adopted Substitute Resolution 206, which advocates legislative, regulatory, and judicial action providing for *formal physician organizational involvement* in *all* areas of public- and private-sector health care policy development and implementation. It also seeks to define the activities necessary for establishment of formal physician organizational involvement and sets as the highest priority the AMA's continued efforts to gain necessary antitrust law changes.

So, the table is set. We must sacrifice our personal agendas for the good of the profession as a whole. We must maintain our commitment to providing the best health care for a reasonable price.

MM

People and Places Making Medical News

People

Kennedy Receives AMA Award

Byrl J. "B. J." Kennedy, M.D., emeritus regents' professor of medicine and emeritus masonic professor of oncology at the University of Minnesota, received the AMA 1992 Scientific Achievement Award at the AMA's annual meeting June 21. The award is made only on special occasions and is given to a physician in recognition of outstanding work.

Kennedy, known as the "father" of medical oncology in the United States, was the first in the country to demonstrate the effectiveness of daunorubicin, now the basis of acute leukemia treatment. He also initiated the first randomized test showing the benefits of support counseling for cancer patients. The positive results were used to develop the "I Can Cope" program offered nationwide by the American Cancer Society.

Jacott Re-elected to AMA Board

William E. Jacott, M.D., assistant vice president for health sciences at the University of Minnesota and an associate professor of family practice at the university's medical school, was re-elected to a second three-year term on the AMA Board of Trustees at the AMA annual meeting in Chicago June 24. Following his election, the Board of Trustees elected him secretary/treasurer. Jacott was nominated and sponsored by the Minnesota Medical Association and endorsed by the North Central Medical Conference, the American Academy of Family Physicians, the AMA Section on Medical Schools, and the Hennepin County Medical Society.

As one of 14 members of the AMA Board of Trustees, Jacott helps carry out health care policies

developed by the AMA House of Delegates and participates in making AMA policy decisions on national health care issues. During his first term as AMA trustee, Jacott represented the AMA on national media tours and in testimony before the U.S. Congress, served as commissioner of the Joint Commission on Accreditation of Health Care Organizations, as director of the Commission on Office Laboratory Accreditation, and as president of the AMA Education and Research Foundation.

Others Making AMA News

William R. Kennedy, M.D., clinician and professor of neurology at the University of Minnesota Medical School, was elected to a third three-year term on the Council on Scientific Affairs at the AMA Annual Meeting in June. The council brings current scientific and practice topics to the attention of AMA members and their patients. Kennedy, one of 12 members on the council, was sponsored by the Minnesota Medical Association, the American Academy of Neurology, and the North Central Medical Conference.

Gail Gamble, M.D., a Minnesota Medical Association trustee and a physical medicine physician at Saint Marys Hospital in Rochester, has been appointed to the 10-member AMA Women in Medicine Advisory Panel, which will advise the AMA Board of Trustees on women's issues.

A. Stuart Hanson, M.D., MMA president-elect and a pulmonary disease specialist at Park Nicollet Medical Center in Minneapolis, will represent the American Group Practice Association on an advisory committee to the AMA Coalition Against Family Violence.

Melissa Garretson, a third-year medical student at Mayo Medical School, was installed as the AMA

Medical Student Section representative on the AMA Board of Trustees.

Thomas Stolee, M.D., MMA president and a pathologist at Miller-Dwan Hospital in Duluth, was a panelist on the AMA Forum on Health Care Reform, which was broadcast on three national television stations. The discussion focused on national health care proposals and the cost and access issues driving the health care reform debate.

Health Care Commission Formed

The MMA appointed Jasper R. Daube, M.D., a neurologist at Mayo Clinic, to the 25-member Minnesota Health Care Commission and Andrew J. K. Smith, chair of the MMA Board of Trustees and a neurological surgeon in Minneapolis, as Daube's alternate.

Gov. Arne Carlson named his 10 appointees June 30. He selected MMA's nominee Robert T. Kelly, M.D., a family physician from Grand Rapids, to the rural physician position on the commission. Tom Swain, a retired executive of The St. Paul Companies, will head the commission and will also serve as the over-65 consumer representative. Swain is currently a board member of the Citizens League, board chair of Courage Center, and vice chair of the Regent Candidate Advisory Council for the University of Minnesota. Carlson also appointed K. James Ehlen, M.D., chief executive officer of Medica, to represent health plans.

Carlson predicted the commission will first meet this month.

HealthRight Oversight Commission

Members of the HealthRight Legislative Oversight Commission, which will study the stability of

HealthRight's funding, the effect of passing the 2 percent tax on to third-party payers, and the bill's effect on health care access, were announced June 30. The following legislators were appointed: Reps. Lee Greenfield, DFL-Minneapolis; Roger Cooper, DFL-Bird Island; Paul Ogren, DFL-Aitken; Dave Gruenes, IR-St. Cloud; Peggy Lepek, IR-Golden Valley; and Sens. Linda Berglin, DFL-Minneapolis; Judy Traub, DFL-Minnetonka; Pat Piper, DFL-Austin; Joanne Benson, IR-St. Cloud; and Duane Benson, IR-Lanesboro.

The commission's preliminary report is due to the Legislature January 15, 1993, and its final report is due in 1994.

Office of Rural Health Director

Chari Konerza, formerly MMA director of medical practice and payment systems, left the MMA July 14 to become director of the Office of Rural Health.

St. Paul-Ramsey Chief of Surgery

St. Paul-Ramsey Medical Center appointed John Weigelt, D.V.M., M.D., chief of its Department of Surgery. He also has been appointed professor of surgery and vice chair of the University of Minnesota's Department of Surgery. Prior to his appointment at St. Paul-Ramsey, Weigelt served as medical director of the trauma department at Parkland Memorial Hospital in Dallas.

United Hospital Medical Director

United Hospital named Emanuel Gaziano, M.D., medical director of its Department of Maternal-Fetal Medicine effective July 1. Gaziano is clinical associate professor for the Department of Obstetrics and Gynecology at the University of Minnesota Medical School and will continue as director of perinatology at Abbott Northwestern, a position he has held since 1986.

Gaziano replaces Peter Fehr, M.D., who has been medical director since 1984.

GHAH Chair-Elect

George C. Halvorson, president and chief executive officer of Group Health, Inc., has been named chair-elect of the board of directors of the Group Health Association of America, a trade association for health maintenance organizations. He was named to the position during the association's 42nd annual conference held in Minneapolis in June.

Group Health/MedCenters Execs

Group Health, Inc., and MedCenters Health Plan have named senior management to lead the new holding company they are forming. As *Minnesota Medicine* went to press, the groups expected formal creation of the firm to occur in late July.

Plans announced in June called for Group Health President and CEO George Halvorson to hold the same titles in the new organization. Kirby Erickson, now executive director of MedCenters, will be executive vice president and chief operating officer. Paul Brat, M.D., medical director and senior vice president at Group Health, will be Group Health's chief operating officer and medical director. Mary Brainerd, previously senior vice president and chief marketing officer at Blue Cross and Blue Shield of Minnesota, has been hired as executive director and chief operating officer of MedCenters.

ASAP President

Charles McCafferty, M.D., was elected 25th president of the American Society for Adolescent Psychiatry at its annual meeting in Washington, D.C. McCafferty, a clinical professor of psychiatry at the University of Minnesota and chair of the Clinical Faculty Advisory Committee of the Department of Psychiatry, emigrated to the United States from Derry, Ireland, in 1962 to complete his psychiatry training at Mayo Clinic in Rochester. He has been in private practice in St. Paul since 1968.

Inspector General Resigns

U.S. Inspector General Richard Kusserow has resigned from his post at the Department of Health and Human Services.

In 1990, the American Medical Association and 38 state medical associations called for his resignation. "In his nine years as inspector general, Kusserow has failed to demonstrate the balance, objectivity, and judgment essential to the job," the AMA told HHS Secretary Louis W. Sullivan, M.D. Physicians were angry when Kusserow defamed a deceased physician on the September 20, 1990, broadcast of "ABC Prime Time Live," claiming the physician was drug-impaired.

P l a c e s

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Abbott and North Memorial Plan Joint Facility

Abbott Northwestern Hospital of Minneapolis and North Memorial Medical Center of Robbinsdale plan to jointly develop and operate a West Suburban Health Campus, which will be located on the northeast corner of Interstate 494 and Highway 55. Hospital officials said a wide range of services are being considered, including day surgery and outpatient services, pharmacy, laboratory and diagnostic services. Future plans under review include urgent care services, senior services, child care, and health fitness facilities. The center is expected to open in early 1994.

"Our intention in this cooperative venture is to reduce health care costs and at the same time improve the quality and accessibility of health care in the west suburban region," said Gordon Sprenger, Abbott Northwestern's chief executive officer, noting that the Plymouth area has experienced considerable population growth.

The joint venture, with equal ownership by the two hospitals, will be established as a corporation separate from the two owners, with

its own board and management. Hospital officials said some contingencies must be met before actually establishing the joint

venture, such as acquiring land, receiving approvals from the city of Plymouth, and meeting federal and state regulatory requirements.



K. James Ehlen, M.D.
Chairman, CEO Medica

NETWORK QUALITY IS PRIORITY FOR PURCHASERS

Last month I talked about the pressure business and government are putting on managed care organizations, like Medica, to prove that their participating physicians are able to provide quality care at the lowest possible cost.

The most recent and clearest expression of this interest in network performance has come in requests for proposals from local buyers' coalitions. Not too long ago, businesses wanted a network large enough to offer choices among providers to suit their employees. Now, they're seeking a network that can supply quality care and demonstrate it without generating higher costs.

Medica's response to these requests has made quality an unquestioned priority. The Medica Board's Quality Assurance Committee oversees our QA program. The Medical Policy Council sets medical policy and guidelines for participating physicians. Our Medical Director, Dr. Allan Chernov, has enlisted the help of physicians in all specialties to develop programs that evaluate both the technical and intangible aspects of care.

Together, we will be required to objectively demonstrate the effectiveness of this process in reducing variations in the management of patients' health care.

I believe our collaborative approach to peer review deals effectively with all aspects of the cost/quality issue. We are in a position to begin demonstrating value to the purchasers of care.

Medica's effectiveness already has been publicized in reports from the Minnesota Department of Health that show Medica physicians managed their patients to produce rates of utilization, hospital admissions, average lengths of stay and inpatient daily costs at or below those of other Twin Cities HMOs.

We will continue to prove that quality, not quantity, is Medica's hallmark.

MEDICA

Physicians Rank Mayo No. 2

For the second straight year, U.S. physicians have ranked Mayo Clinic as the nation's second-best hospital, behind Baltimore's Johns Hopkins Hospital.

In a survey published in the June 15 *U.S. News and World Report*, doctors were asked to name the five leading institutions in their specialties, regardless of location or expense. To make the "best" list, hospitals had to be named on at least three of 16 lists of specialties. Mayo rated in 12 specialties: cancer, cardiology, endocrinology, gastroenterology, gynecology, neurology, orthopedics, otolaryngology, psychiatry, rehabilitation, rheumatology, and urology. Johns Hopkins ranked in 13.

The survey, which included responses from more than 1,000 physicians, assumes that a hospital's reputation with physicians is the most reliable measure of care.

Third St. Mary's Health Clinic Opens in Minneapolis

The Sisters of St. Joseph of Carondelet on June 22 opened the third St. Mary's Health Clinic for the needy in Minneapolis. Ascension Church in north Minneapolis donated space for the clinic, which will be located in a home at 1701 Bryant Avenue North. This is the third of four planned clinics the Sisters have opened in the Twin Cities in 1992. Volunteer physicians and nurses staff the St. Mary's Health Clinics, operated by Carondelet LifeCare.

Commission Approves United Hospital Cancer Program

The Commission on Cancer of the American College of Surgeons has granted three-year approval to the comprehensive community cancer program at United Hospital in St. Paul. Established by the American College of Surgeons in 1932, the approvals program recognizes hospitals that equip and staff themselves to provide the best in diagnosis and treatment of cancer. The program promotes consulta-

tion among family physicians, surgeons, medical oncologists, radiation oncologists, diagnostic radiologists, pathologists, and other cancer specialists.

Socioeconomics

Small Business Coalition Chooses Prudential

A coalition of 363 small- and medium-sized businesses, formed by the Employers Association of Minnesota, chose Prudential Insurance Co. of America to provide health care coverage for its members. Prudential was chosen over two other bidders, Blue Cross and Blue Shield of Minnesota and Group Health/MedCenters (which plan to merge), for the coalition's 160,000 employees and dependents.

Insurance rates for employers who commit to stay in the buyer's group for three years will drop an average 13 percent in 1993, and Prudential has guaranteed that the price of health care procedures will not rise more than 10 percent in each of the next two years. Thomas Ebert, president of the Employers Association, said rates were an important consideration, but Prudential also shared the association's cost-cutting and quality concerns.

The plan will set up "practice guidelines" for physicians and monitor the quality and results of care. It will save money by discouraging ineffective or unnecessary care, according to George Morrow, a consultant hired by the association to help set up the coalition.

Business Group Selects GroupCare Consortium

A coalition of 14 major Twin Cities employers, known as the Business Health Care Action Group, chose the GroupCare Consortium to offer health coverage for its employees for three years starting January 1. Members of the GroupCare Consortium are Park Nicollet Medical Center, Mayo Clinic, Group Health, Inc., and MedCenters Health Plan.

The coalition chose the GroupCare Consortium over more than a dozen other health plans and alliances that submitted bids

because it has programs for cost and quality control and preventive health, according to Bryan Bushwick, a consultant with Towers



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Perrin, the consulting firm that advised the coalition.

The 14 companies in the coalition are Bemis, Cargill, Carlson Companies, Ceridan, Dayton Hudson, First Bank System, General Mills, Honeywell, IDS, Norwest Corp., Pillsbury, Rosemount Inc., Supervalu, and Tennant.

UHC Establishes Center for Health Care Policy

United HealthCare Corporation has established a Center for Health Care Policy and Evaluation that will undertake performance, outcomes, and cost-effectiveness evaluation for both the company and external clients. The center will expand existing UHC research and evaluation activities in outcomes research, patient surveying, and cost-effectiveness analysis; increase research and data product offerings to external clients; and participate in major public policy initiatives to influence reform of health care delivery, financing, and access.

Sheila Leatherman, UHC's vice president for research and development since December 1988, will be president of the center, and the staff will include former staff of UHC's Research and Development Department.

Officials at Medica announced in July that they will work cooperatively with the center to conduct research into the quality and cost of health care in Minnesota. K. James Ehlen, Medica's chairman and chief executive officer, said the relationship will significantly expand Medica's current research and evaluation activities in outcomes research, performance measurement, and cost-effectiveness.

U Hospital to Cut Costs

The University Hospital and Clinic is cutting costs in an effort to combat declining patient volumes. The hospital usually earns a profit, but this fiscal year the hospital expects to be near the break-even point—or possibly face a loss.

The university's hospital has been affected by increasing competition in the Twin Cities. It used to be the primary institution for high-tech medical care, but many area hospitals have increased their specialization and formed organizations such as the Minneapolis Heart Institute. Such changes have led to lower admissions, which fell from 19,247 in 1987-88 to below the projected 17,894 for 1991-92.

The hospital expects to trim the number of full-time equivalent employees from 3,700 to 3,480 during the next year, said Robert Dickler, hospital director. The hospital had 4,100 employees three years ago. The hospital's budget proposal also recommends that the hospital set aside \$7.5 million for potential joint ventures and acquisitions. Dickler said university officials are talking with four or five organizations, most in greater Minnesota, about a possible joint venture or acquisition.

Mayo and Midelfort Clinic Announce Merger Plans

Mayo and Midelfort Clinic, a 90-physician medical group practice in Eau Claire, Wisconsin, announced in June that they have reached an agreement in principle to merge their two medical practices. The Mayo Foundation Board of Trustees is expected to approve the agreement in August. Both medical practices expect that a final agreement will be reached by October 1.

Midelfort Clinic patients will continue to receive primary and secondary health care in Eau Claire, and Mayo Clinic will be an option for specialized care. Under the agreement, Midelfort doctors and allied health staff will become employees of "Midelfort Clinic—a Mayo Regional Practice."

In addition to its main office in Eau Claire, Midelfort has offices in Chippewa Falls, Barron, Cameron, and Chetek, Wisconsin.

Kids Don't Put Health Facts to Use

Minnesota students generally know health concepts but don't always

practice them, according to a new test given to 9,900 students in grades four, eight, and 11. The health test shows, for example, that students know condoms reduce the risk of contracting the AIDS virus, but a survey indicates that only 25 percent of sexually active 12th-grade girls and 32 percent of boys use condoms, said Robert Wandberg, a health specialist at the state Department of Education. "Students have knowledge of condoms, but they do not have the personal skills involved in condom use," he said.

The test also showed that girls understand health issues better than boys do, and the disparity increases as students get older. Girls know more about personal care, relationships, and emotions, and they have more concern about alcohol and tobacco abuse.

Innovations

U Helps Develop Way to Map Brain

Scientists from the University of Minnesota and AT&T Bell Laboratories, based in Murray Hill, New Jersey, have developed a method for studying how the brain functions using the university's new, \$5.2 million magnetic resonance imager. The technique, described in the July 1 *Proceedings of the National Academy of Sciences*, is a non-invasive, precise method for measuring brain-wave activity and should result in more successful brain surgery and reduced medical costs.

The new procedure traces blood flow in the brain. As patients move limbs and think about images, computers capture the magnetic waves from shifting blood supplies in their brains. Software programs then convert the electronic data into detailed images.

"In the scientific community, this is one of the most exciting things that has come along in a

long time," said Kamil Ugurbil, director of the Center for Magnetic Resonance Research at the university.

Area Group Creates Super Glue for Surgery

A chemistry professor and a surgeon from the Fargo-Moorhead area, working with some undergraduate students, have come up with an adhesive they think might work in surgery. It's stronger than sutures, creates a non-toxic bond in 30 seconds, and works well in wet conditions.

Nicholas Kowanko, a chemistry professor at Moorhead State University and former 3M employee, and David Browdie, M.D., a surgeon at St. Luke's Hospital in Fargo, North Dakota, reached a milestone when Kowanko glued two pork chops together and Browdie couldn't pull them apart. Later tests on mice, rabbits, and pigs confirmed that the glue can patch holes quickly in arteries and bowels and stop a spleen from bleeding. Future tests will show how well the repairs hold.

The glue will never completely replace sutures but could become useful in the operating room, said Browdie and Kowanko. They said it will be difficult to win approval for the adhesive in the United States, but Browdie said the glue may find a market overseas, where several surgical glues are already used.

Lyme Vaccine Promising

Yale researchers have developed a vaccine for Lyme disease that not only protects laboratory mice from infection when bitten by bacteria-infected ticks, but also kills bacteria in the ticks, according to a report in the June 15 *Proceedings of the National Academy of Sciences*. The vaccine could be tested in humans in as little as three years.

The researchers vaccinated mice with a protein, called OspA, isolated from the cell wall of the

Lyme spirochete. This produced antibodies that protected the mice from the Lyme spirochete. Furthermore, when researchers examined the ticks 10 days after they had bitten the mice, they found no trace of the spirochetes. The researchers earlier found they could immunize wild mice by leaving out bait that contains the Lyme disease protein, a discovery they said suggests Lyme disease could potentially be wiped out.

The Centers for Disease Control reports that the number of Lyme Disease cases rose more than 17 percent in 1991 after dropping in 1990. It said 9,344 cases were reported last year, compared with 7,493 in 1990.

Baboon Liver Implanted in Human

Surgeons at the University of Pittsburgh Medical Center performed the first transplant of a baboon liver into a human June 28. After the surgery, the 35-year-old man was awake and in critical but stable condition, said his physicians. Because he was attached to a ventilator, he was unable to speak, but he was responding to simple commands by squeezing hands.

The man was infected with hepatitis B, which had destroyed his liver, and he was expected to die within weeks of liver failure. If the transplant succeeds, he will be the first to overcome rejection of an animal transplant. He is being given FK506, an experimental anti-rejection drug.

New Prostate Drug Approved

Proscar, a new drug manufactured by Merck & Co. for treating symptoms of enlarged prostate glands, was approved for marketing in June. The drug's side effects remain to be assessed.

A daily Proscar pill can shrink an enlarged prostate gland, but not all patients respond to the drug, which must be taken for a lifetime and will cost about \$640 a year. Its generic name is finasteride.

Medical Research

Lead High in Twin Cities Water

Drinking water sampled from homes throughout Minneapolis and St. Paul exceed new federal standards, according to test results released in July. Forty-eight percent of the homes sampled in St. Paul had more than the allowed 15 parts per billion (ppb) of lead, and 16 percent in Minneapolis exceeded the limit. The federal lead standard was reduced from 50 ppb because such levels pose danger to young children. Both cities are required by federal law to lower the levels.

Health experts said the overall levels in Minneapolis/St. Paul are low and pose no immediate health hazard, but they recommend that residents run cold taps for one to two minutes to rinse the pipes before drinking the water. They also warned that hot tap water should not be used for drinking or cooking because it continually leaches lead out of pipes and connections.

Water sources in both cities were tested and found to be relatively free of lead, so officials believe most contamination is from lead in pipes, solder, fittings, and connection lines.

The Environmental Protection Agency released a report earlier in the month that said Minnesota's lead poisoning levels were the highest of six Midwestern states studied, but local officials disputed the figures because they were based on a computer model rather than actual blood test results. Local health officials will begin testing the blood of 15,000 children in Hennepin, Ramsey, Dakota, and Scott counties this summer for lead poisoning.

AIDS Update

CDC: Let States Decide

The Centers for Disease Control has decided after lengthy debate to let state and local health depart-

ments decide on a person-by-person basis what care HIV-infected health care workers can provide. The CDC recommends that state health departments take steps to prevent transmission of HIV to patients and monitor infected health care workers to make sure they remain physically and mentally fit.

FDA Approves New AIDS Drug

The FDA has approved DDC, a new AIDS drug that will be marketed by Hoffmann-La Roche Inc. under the brand name HIVID. It is being released under an accelerated approval system and will continue to undergo clinical trials. If those studies show the drug is ineffective, it will be withdrawn from the market.

The drug is approved for use in combination with AZT. Also known as dideoxycytidine and zalcitabine, DDC is the third AIDS drug to be licensed since 1987, when AZT was approved. The FDA approved DDI last fall. MM

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A Calendar of Continuing Medical Education Courses

Provided through the MMA Medical Education Subcommittee on CME Resources. For assistance with scheduling meetings or for information on future medical meetings and CME courses, please contact the MMA office: 2221 University Avenue SE, Suite 400, Minneapolis, Minnesota 55414; 612/378-1875. Information for each entry is arranged by date; name of program; primary sponsor; location; contact person.

AUGUST 1992

Aug. 8 **Prevention and Management of Osteoporosis** Office of Continuing Medical Education, University of Minnesota Medical School; Canterbury Inn, Shakopee, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Aug. 14-16 **1992 Update on Surgical Critical Care** Society of Critical Care Medicine; Minneapolis Marriott City Center, Minneapolis, MN. CONTACT: Society of Critical Care Medicine, 8101 East Kaiser Blvd., Anaheim, CA 92808-2214; 714/282-6000.

Aug. 17-21 **Team Management of Diabetes Mellitus** International Diabetes Center; International Diabetes Center, Minneapolis, MN. CONTACT: Cindy Poppitz, International Diabetes Center, 5000 West 39th Street, Minneapolis, MN 55416; 612/927-3393.

Aug. 19-25 **Mayo Euro Date 1992 (Gastroenterology)** Mayo Foundation; Vienna, Austria, and Budapest, Hungary. CONTACT: Rita Kunz or Jan Fleck, Mayo Clinic/Mayo Foundation, Postgraduate Courses, 200 1st Street SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

Aug. 20-22 **Operative Gynecology: Third Annual Live Televideo Conference** Mayo Clinic/Mayo Foundation; Mayo Foundation, Rochester, MN. CONTACT: Postgraduate Courses, Mayo Clinic/Mayo Foundation, 200 1st Street SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

Aug. 31-Sept. 4 **Team Management of Diabetes Mellitus** International Diabetes Center; International Diabetes Center, Minneapolis, MN. CONTACT: Cindy Poppitz, International Diabetes Center, 5000 West 39th Street, Minneapolis, MN 55416; 612/927-3393.

SEPTEMBER 1992

Sept. 9-18 **Pain Management for the Primary Care Physician** Hennepin County Medical Center; Hennepin County Medical Center, Minneapolis, MN. CONTACT: Program Coordinator, 701 Park Avenue, Mail Code 867A, Minneapolis, MN 55415-1829; 612/347-2075.

Sept. 10-11 **Applied Clinical Research Methods** Hennepin County Medical Center; Hennepin County Medical Center,

Minneapolis, MN. CONTACT: Ann Samways, 701 Park Avenue, Mail Code 867A, Minneapolis, MN 55415-1829; 612/347-2075.

Sept. 10-11 **Second Annual Children's Hospital of St. Paul Practical Pediatrics Course for the Primary Care Physician** Children's Hospital of St. Paul; United/Children's Conference Center, St. Paul, MN. CONTACT: Sue Hance, Health One Medical Education, 2810 57th Avenue North, Minneapolis, MN 55430; 612/574-7895 or 800/343-DOCS.

Sept. 10-11 **Hepatology Update 1992** Mayo Clinic/Mayo Foundation; Mayo Clinic, Rochester, MN. CONTACT: Rita Kunz or Jan Fleck, Mayo Clinic/Mayo Foundation, Postgraduate Courses, 200 1st Street SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

Sept. 11-12 **Lasers in Orthopedic Surgery** Laser Center of Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Laser Center 39102, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-3000.

Sept. 12-13 **University of Minnesota Weekend Update: Infectious Disease** Office of Continuing Medical Education, University of Minnesota Medical School; Canterbury Inn, Shakopee, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Sept. 14-18 **Team Management of Diabetes Mellitus** International Diabetes Center; International Diabetes Center, Minneapolis, MN. CONTACT: Cindy Poppitz, International Diabetes Center, 5000 West 39th Street, Minneapolis, MN 55416; 612/927-3393.

Sept. 17-18 **Sixteenth Annual Infection Control Conference, Twentieth Anniversary of APIC—Then and Now** Minnesota Association for Practitioners of Infection Control; Northland Inn and Conference Center, Brooklyn Park, MN. CONTACT: Wanda Brown, 421 Tower Road, St. Croix Falls, WI 54024; 715/483-3261.

Sept. 18 **Thrombolytic Therapy in Acute MI** Abbott Northwestern Hospital; Minneapolis Heart Institute, Minneapolis, MN. CONTACT: Minneapolis Heart Institute Foundation, 920 East 28th Street, Minneapolis, MN 55407; 612/863-3979.

Sept. 18-19 **Advanced Laparoscopic Abdominal Surgery Seminar** Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

Sept. 18-20 **Annual Ambulance Medical Directors Retreat** Hennepin County Medical Center; Breezy Point Resort,

Breezy Point, MN. CONTACT: Ann Samways, 701 Park Avenue, Mail Code 867A, Minneapolis, MN 55415-1829; 612/347-2075.

Sept. 19-23 **Radiology/92: Imaging & Intervention—1992 and Beyond** Office of Continuing Medical Education, University of Minnesota Medical School; Mayo Memorial Auditorium, University of Minnesota, Minneapolis, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Sept. 23 **Biofeedback of Colorectal Disorders** Office of Continuing Medical Education, University of Minnesota Medical School; Moos Tower, University of Minnesota, Minneapolis, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Sept. 23 **Endorectal Ultrasonography** Office of Continuing Medical Education, University of Minnesota Medical School; Midway Hospital, St. Paul, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Sept. 24-26 **Fourth International Vaginal Surgery Program** Hennepin County Medical Center; Ritz Carlton, St. Louis, MO. CONTACT: Ann Samways, 701 Park Avenue, Mail Code 867A, Minneapolis, MN 55415-1829; 612/347-2075.

Sept. 24-26 **Principles of Colon and Rectal Surgery** Office of Continuing Medical Education, University of Minnesota Medical School; Mayo Memorial Auditorium, University of Minnesota, Minneapolis, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Sept. 25 **Duluth Diabetes Conference—Current Issues in Type I Diabetes Mellitus** The Duluth Clinic; Fitger's Spirit of the North Theatre, Duluth, MN. CONTACT: Rockie Odberg, 400 East Third Street, Duluth, MN 55805; 218/725-3838.

Sept. 25-27 **Mechanical Ventilation: Principles and Practice** Office of Continuing Medical Education, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Sept. 26 **Minnesota Radiological Society Fall Meeting** Minnesota Radiological Society; Radisson Hotel, Rochester, MN. CONTACT: Allen V. Bergh, M.D., 69 West Exchange Street, St. Paul, MN 55102; 612/291-3183.

Sept. 26 **Interventional Radiology, Surgery and Medicine: New Perspectives for the Primary Care Physician** Abbott Northwestern Hospital, Minneapolis Heart Institute Foundation, and Consulting Radiologists, Inc.; The Registry Hotel, Bloomington, MN. CONTACT: Jillann Larson,

CME Office 14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

Sept. 29-Oct. 9 **Canada/New England Air/Sea Cruise** North Central Medical Conference; Canada and New England. CONTACT: North Central Medical Conference, 1845 Hampshire Avenue, Suite 200, St. Paul, MN 55116; 612/698-1888.

OCTOBER 1992

Oct. 2-3 **Advanced Laparoscopic Abdominal Surgery Seminar** Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

Oct. 2-3 **Nursing Home Medical Directors' Conference** Office of Continuing Medical Education, University of Minnesota Medical School; Sheraton Midway Hotel, St. Paul, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Oct. 4-6 **Fifth National Conference on Sexual Compulsivity/Addiction** Office of Continuing Medical Education, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Oct. 8-24 **China/Yangtze River Adventure** North Central Medical Conference; Beijing, Chongqing, Yangtze River/Three Gorges, Xian, Shanghai, Hong Kong. CONTACT: North Central Medical Conference, 1845 Hampshire Avenue, Suite 200, St. Paul, MN 55116; 612/698-1888.

Oct. 9 **Current Clinical Cardiology for Physicians & the 11th Annual Jesse E. Edwards, M.D., Lecture** St. Paul Health Clinic/Health One Corporation; United/Children's Conference Center, St. Paul, MN. CONTACT: Eleanor Waldrup, 333 North Smith, St. Paul, MN 55102; 612/220-8558 or 800/343-DOCS.

Oct. 9 **University of Minnesota Weekend Update: Oncology, Cardiology** Office of Continuing Medical Education, University of Minnesota Medical School; St. James Hotel, Red Wing, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Oct. 9-10 **Adolescent Medicine and Health Care** Office of Continuing Medical Education, University of Minnesota Medical School; Park Inn International, Minneapolis, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Oct. 14-16 **Internal Medicine Review** Office of Continuing Medical Education, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of Continuing Medical Educa-

tion, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Oct. 19-20 **Advanced Trauma Life Support (ATLS)** Health One Corporation; United/Children's Conference Center, St. Paul, MN. CONTACT: Sue Hance, Health One Medical Education, 2810 57th Avenue North, Minneapolis, MN 55430; 612/574-7895 or 800/343-DOCS.

Oct. 22-23 **23rd Annual Autumn Seminar: Obstetrics and Gynecology and Women's Cancer Symposium** Office of Continuing Medical Education, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Oct. 23 **Lyme Borrelia Symptomium** Abbott Northwestern Hospital, Minnesota Institute of Public Health, Lyme Disease Coalition of Minnesota; Airport Hilton, Minneapolis, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

Oct. 23-24 **Pelviscopic Surgery Including Laparoscopic Hysterectomy** Laser Center of Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CON-

TACT: Laser Center 39102, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-3000.

Oct. 23-24 **Fifth Annual New Ulm Fall Seminar** Sioux Valley Hospital/Health One Corporation; Holiday Inn, New Ulm, MN. CONTACT: Sue Hance, Health One Medical Education, 2810 57th Avenue North, Minneapolis, MN 55430; 612/574-7895 or 800/343-DOCS.

Oct. 23-24 **Conference for Directors of Medical Education** Minnesota Medical Association; Marriott Hotel, Bloomington, MN. CONTACT: Jane Phillip, Minnesota Medical Association, 2221 University Avenue SE, #400, Minneapolis, MN 55414; 612/378-1875 or 800/999-1875.

Oct. 25 **The Individualized Management of Hyperlipoproteinemia** Mayo Clinic/Mayo Foundation; Mayo Foundation, Rochester, MN. CONTACT: Rita Kunz or Jan Fleck, Mayo Clinic/Mayo Foundation, Postgraduate Courses, 200 1st Street SW, Rochester, MN 55905; 507/284-2509.

N O V E M B E R 1 9 9 2

Nov. 6 **Thrombolytic Therapy in Acute MI** Abbott Northwestern Hospital; Minneapolis Heart Institute, Minneapolis

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lis, MN. CONTACT: Minneapolis Heart Institute Foundation, 920 East 28th Street, Minneapolis, MN 55407; 612/863-3979.

Nov. 6 **17th E. T. Bell Fall Pathology Symposium** Office of Continuing Medical Education, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Nov. 7 **Fourth Annual Oncology Conference** Health One Corporation; Radisson Ridgedale, Minneapolis, MN. CONTACT: Sue Hance, Health One Medical Education, 2810 57th Avenue North, Minneapolis, MN 55430; 612/574-7895 or 800/343-DOCS.

Nov. 7-8 **Update in Cardiovascular Disease** Mayo Clinic/ Mayo Foundation; Mayo Foundation, Rochester, MN. CONTACT: Rita Kunz or Jan Fleck, Mayo Clinic/Mayo Foundation, Section of CME, 200 1st Street SW, Rochester, MN 55905; 507/284-2509.

Nov. 12-14 **Lasers in Orthopedic Surgery** Laser Center of Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Laser Center 39102, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-3000.

Nov. 13-14 **Update on Inflammatory Bowel Disease** Mayo Clinic/Mayo Foundation; Mayo Foundation, Rochester, MN. CONTACT: Rita Kunz or Jan Fleck, Mayo Clinic/Mayo Foundation, Postgraduate Courses, 200 1st Street SW, Rochester, MN 55905; 507/284-2509.

Nov. 14 **Topics in Pediatric Emergency Medicine** Minneapolis Children's Medical Center; Minneapolis Children's Medical Center, Minneapolis, MN. CONTACT: Kathy Ingerson, Minneapolis Children's Medical Center, 2525 Chicago Avenue South, Minneapolis, MN 55404; 612/863-5884.

Nov. 21 **Case Studies in Otorhinolaryngology** Mayo Clinic/ Mayo Foundation; Mayo Foundation, Rochester, MN. CONTACT: Rita Kunz or Jan Fleck, Mayo Clinic/Mayo Foundation, Postgraduate Courses, 200 1st Street SW, Rochester, MN 55905; 507/284-2509.

DECEMBER 1992

Dec. 4 **Genetics for Practicing Physicians** Office of Continuing Medical Education, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

FEBRUARY 1993

Feb. 26-28 **Neurology in Clinical Practice** Mayo Clinic/ Mayo Foundation; Mayo Foundation, Rochester, MN. CONTACT: Rita Kunz or Jan Fleck, Mayo Clinic/Mayo Foundation, Postgraduate Courses, 200 1st Street SW, Rochester, MN 55905; 507/284-2509.

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(6/92-R)

Internist to join a progressive 13-physician group practice. Rural college town 30 miles from St. Paul, Minnesota. New clinic and constructing new hospital. Contact: Robert B. Johnson, M.D., River Falls, WI 54022; 715/425-6701.

(*9/91-R)

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Mankato Clinic, Ltd. is seeking BC/BE physicians in the following specialties: invasive cardiology, oncology/hematology, pulmonary medicine, general surgery, gastroenterology, family practice, and general internal medicine. The Mankato Clinic is a 53-physician multispecialty group

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(12/91-R)

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(7/92-R)

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(4/90-R)

MDsearch assists medical groups and hospitals in their recruiting efforts. For confidential information on opportunities in the Upper Midwest, send CV and/or call collect: Mary Jo Cordes, MDsearch, PO Box 21507, St. Paul, MN 55121; 612/454-7291.

(12/91-R)

Lake City, Minnesota: Family physician BC/BE needed to join three other FPs in progressive, growing practice on Lake Pepin/Mississippi River in southeastern Minnesota. Excellent first-year salary/benefits in a scenic community with multiple recreational opportunities. Contact: D.D. Pflaum, M.D., 303 South Washington, Lake City, MN; 612/345-3318.

(8/90-R)

Olmsted Medical Group is seeking BC/BE physicians in the following specialties: orthopedics, radiology, family practice, emergency medicine, and ob/gyn. Great opportunity for well-trained physicians to join a 55+ physician multispecialty group in a dynamic, progressive practice. In addition to the main office in Rochester, the group operates eight branch offices in southeastern Minnesota. Excellent salary/benefits package includes malpractice insurance, flexible benefits plan, 401(k) and profit sharing, and relocation assistance. Send CV to: Olmsted Medical Group, Attn: Susan Schuett, 210 Ninth Street SE, Rochester, MN 55904.

(1/92-R)

Downtown Office Space for Rent: Physician in the Medical Arts Building, 825, wishes to sublet to another physician on a part-time basis for the purpose of sharing overhead expenses. Call: 612/370-0553. (6/90-R)

Wisconsin: 120-physician multispecialty clinic in the Fox River Valley of northeastern Wisconsin desires two BC/BE pediatricians to join department of 15 BC/BE pediatricians. Excellent compensation and benefits package, leading to shareholder status after two years. The community offers a superb recreational, cultural, and family environment in which to practice. For information please call or write: Howard Kidd, M.D., La Salle Clinic, 411 Lincoln Street, Neenah, WI 54956; 414/727-4276. (3/91-R)

Family Physician wanted to join three board-certified M.D.s in well-established, expanding group practice. Weekend ER coverage. No buy-in. Financial package hard to beat. Enjoy a progressive, rural city within easy reach of St. Cloud and Minneapolis. Contact: Dr. Jim Mohs, Melrose Clinic, 603 West Main Street, Melrose, MN 56352; office, 612/256-4228; home, 612/256-3488. (4/91-R)

Internal Medicine, Pediatrics, and Dermatology practice opportunities available at the Faribault Clinic. The Faribault Clinic is a multispecialty group practice of 19 physicians. Faribault is located 50 miles south of Minneapolis on I-35. For more information contact: Ray W. Wood, M.D., or Ken Smith, Administrator, 924 NE First Street, Farib-

ault, MN 55021; 507/334-3921.

(4/90-R)

Stillwater: Multispecialty group with emphasis on primary care seeking BC/BE family physician, pediatrician, and internist. Scenic location with excellent school system, supportive medical community with strong local hospital, competitive salary and benefits. Send CV to: Jon Pedersen, St. Croix Valley Clinic, 921 Greeley, Stillwater, MN 55082; 612/439-2215. (12/92-R)

Pediatrician wanted to join group of five board-certified pediatricians in a well-established, progressive group practice. Located in Minneapolis, minutes away from Children's Medical Center. Small practice stressing patient care and preventive medicine. Contact: Gregg Savitt, M.D., 3145 Hennepin Avenue, Minneapolis, MN 55408. (9/91-R)

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St. Cloud Medical Group
1301 West St. Germain Street
St. Cloud, MN 56301
Phone: 612/251-8181

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Glencoe Medical Clinic
525 18th Street East
Glencoe, MN 55336;
612/864-3116 (collect)

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and winter recreational activities. Salary guarantee of \$110,000 with excellent benefits. Send CV or contact: John Schon, Administrator, Dickinson County Hospitals, 400 Woodward Avenue, Iron Mountain, MI 49801; 800/323-8856. *1-8/92

Family Practice: Physicians seeking a BC/BE family practice physician for the Norway, Michigan, service area. The physician would have the option of joining one of the existing practices and/or setting up his/her own practice. Anderson Memorial Hospital is a part of Dickinson County Hospitals and has a service-area population of over 45,000. Contact: Dr. Paul Hayes' office, 906/563-9255, or Dr. William Gladstone's home, 906/563-8743. Anderson Memorial Hospital, Main Street, Norway, MI 49870; 906/563-9243. *1-8/92

Alexandria, Minnesota: Three-person internal medicine group desires to add a fourth partner. Send CV to J. E. McCrery, M.D., 1527 Broadway, Alexandria, MN 56308. 6-9/92

New '92 Cars, Minivans, and Trucks—Save \$\$: Pay only a few hundred dollars over actual dealer cost! All makes and models. Full factory warranty. Save money. Save time. Save aggravation. Dealership delivery. Call Tom Rush at Auto Direct, 612/342-2886. (*4/92-R)

Falls Medical Search Seeks Physicians for practice opportunities locally and nationally. To explore new practice options confidentially, send your CV or call: Pat Falls, Falls Medical Search, 34 Forest Dale Road, Minneapolis, MN 55410; 612/922-0207 or 800/383-8916. (*5/92-R)

General Surgeon: Five-man family practice group seeks surgeon. Only clinic in city of 8,000, one hour from Minneapolis. Position should generate adequate salary and lots of family time. Please contact James W. Dey, M.D., or Ruth Hawker, Clinic Manager, 501 North State Street, Waseca, MN 56093; 507/835-3110. (5/92-R)

One or Two Family Practice Physicians to join five family practitioners. Population 8,000. One hour south of Burnsville Center. Lakes, industry, negotiable salary. Clinic adjacent to hospital. Ample free time to enjoy family life. Contact James W. Dey, M.D., or Ruth Hawker, Clinic Manager, 501 North State Street, Waseca, MN 56093; 507/835-3110. (5/92-R)

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General Internists: Four BC/BE needed to join 12 in multi-specialty clinic in Iowa on the scenic bluffs of the Mississippi overlooking Illinois and Wisconsin. Come grow with us! Sixty-five physician owners manage clinic and HMO. Above average income potential, excellent call schedule, friendly, family lifestyle. Full benefits. Call or write Denis Albright, Director of Physician Recruiting, Medical Associates Clinic, P.C., 1000 Langworthy, Dubuque, IA 52001; 319/589-9981. *3-8/92

Pediatrics, General Surgery, Family Practice—Wisconsin: Single specialty groups seek BC/BE physicians for partnership in exceptional south central community. Shared call, fully equipped and staffed office, very competitive guaranteed salary, and comprehensive benefits package. **Family Practice—Minnesota:** Single specialty group practice in Minnesota River Valley community of 9,000 located 25 miles from Minneapolis seeks family physician for broad-based primary care. **Locum Tenens** positions available throughout Minnesota. For information on these and other opportunities in the Upper Midwest, send CV to: Mary Jo Cordes, President, MDsearch, PO Box 21507, St. Paul, MN 55121; or call collect 612/454-7291, Fax: 612/454-7277. *4-9/92

Psychiatrist, Cambridge, Minnesota: Cambridge Regional Human Services Center, a 225-bed facility serving MR/DD clients, seeks a part-time consultant psychiatrist with an interest and/or experience in treating persons with mental retardation. Competitive salary. One hour from the Twin Cities. Contact David Paulson, M.D., Medical Director, 1235 Highway 293, Cambridge, MN 55008; 612/689-2121. 3-8/92

Eugene, Oregon: 48-physician multispecialty group is seeking BC/BE family physician. Practice includes ob. Excellent schools. Abundant cultural and recreational opportunities. Near Cascade Mountains and coast. Home of University of Oregon. Please send CV to: Sylvia Emory, M.D., Oregon Medical Group, 1650 Chambers, Eugene, Oregon 97402; or phone: 503/686-1711. *3-8/92

ENT Physician: Busy otolaryngologist is seeking an associate to meet the needs of a growing practice. BC/BE physician will find security in this established multispecialty clinic. Location is 15 minutes from downtown Minneapolis and is rich in family, cultural, educational, and recreational opportunities. For further information, contact: Rolf Skogerboe, M.D., Columbia Park Medical Group, 6341 University Avenue NE, Fridley, MN 55432; 612/571-0457. 3-8/92

Issues in Primary Care: September 25-26, 1992, Landmark Inn and Resort, Egg Harbor, Wisconsin. For more information contact: Nadine Punke, Office of Medical Education, 1000 North Oak Avenue, Marshfield, Wisconsin 55449; 800/782-8581, Ext. 5207. 3-8/92

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ity in a rural setting seeking a BC/BE family practitioner. Ideal location to raise a family. Thirty miles from large metropolitan area. Year-round cultural and recreational activities. Excellent salary guarantee, production incentive, and benefits package. For more information, contact: Penny M. Vail, Director, Clinic Services, North Memorial Medical Center, 3300 Oakdale North—3E Perinatal, Minneapolis, MN 55422; 612/520-4839. 3-8/92

Northbrook Clinic: Special opportunity for BC/BE family practitioner to join a well-established, three-physician clinic. This practice will be moving in 1992 to a new facility. This northern suburb offers a safe family environment and outstanding educational, cultural, and recreational amenities. Excellent salary guarantee, production incentive, and benefits package. For more information, contact: Penny M. Vail, Director, Clinic Services, North Memorial Medical Center, 3300 Oakdale North—3E Perinatal, Minneapolis, MN 55422; 612/520-4839. 3-8/92

Wayzata Family Physicians: Special opportunity for BC/BE family practitioner to join a well-established, five-physician practice located in a prime suburb community near beautiful Lake Minnetonka. The area is surrounded by top-quality schools, shopping centers, and an abundance of recreational, family, and social activities. Excellent salary



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guarantee, production incentive, and benefits package. For more information, contact: Penny M. Vail, Director, Clinic Services, North Memorial Medical Center, 3300 Oakdale North—3E Perinatal, Minneapolis, MN 55422; 612/520-4839. 3-8/92

The Morris Medical Center, P.A., is currently seeking a family practitioner to join our multispecialty group. Morris, Minnesota, is a community of 5,500 residents with a four-year liberal arts college. Contact: Mike Flicker, Administrator, PO Box 600, Morris, MN 56267; 612/589-3232. 6-12/92

Physician licensed in the state of Minnesota to perform insurance-type physicals in automated plasmapheresis facility. Flexible PT hours available. ABI, 1552 East Lake Street, Minneapolis, MN 55407. Contact: Joan Jury, 612/721-6464. 2-8/92

General Surgeon: Busy clinical and surgical practice seeks BC/BE general surgeon to join existing department in rapidly growing multispecialty clinic. Located in the northwestern suburbs of Minneapolis, Minnesota, offering suburban living with easy access to an unlimited array of family, cultural, educational, and recreational opportunities. Members of our group earn a highly competitive salary and excellent benefits, including paid vacation and CME; pension and profit-sharing plans; paid malpractice; health, life, dental, and disability benefits. For further information,

contact: John Bordwell, M.D., 9055 Springbrook Drive, Coon Rapids, MN 55433; 612/780-9155. *1-8/92

Manitowoc, Wisconsin: The Manitowoc Clinic, an 18-physician multispecialty group, is seeking BC/BE general surgeons, pediatricians, and obstetrician/gynecologists. Lovely community of 35,000 located mid-state on the shore of Lake Michigan. Guaranteed first-year salary and excellent benefits package. Contact or send CV to: James Robinson, Administrator, 601 Reed Avenue, Manitowoc, WI 54221-1270. Telephone: 414/682-8841. 3-9/92

Wisconsin—Fourth BC/BE Obstetrician/Gynecologist needed to join stable, progressive, primary-care-based HMO/group practice in university town of 60,000 near Minneapolis/St. Paul. Excellent quality of life and outstanding recreational area. Competitive salary and fringe benefits. Contact: Stuart R. Lancer, M.D., M.B.A., Medical Director, Group Health Cooperative, PO Box 3217, Eau Claire, WI 54702-3217; 715-836-8552. *3-9/92

Wisconsin—Family Practitioner Needed by progressive and growing group practice in west-central Wisconsin city of 60,000. Ninety miles from Minneapolis/St. Paul. Primarily prepaid practice with large component FFS. Highly competitive salary with excellent fringe benefits. Practice high-quality care in a good recreational area. Send CV to: Stuart R. Lancer, M.D., M.B.A., PO Box 3217, Eau Claire, WI 54702-3217; 715/836-8552. *3-9/92

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Fairview Clinic Services
600 West 98th Street, Suite 390
Bloomington, MN 55420
(612) 885-6224 or toll free 1-800-842-6469



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The Alexandria Clinic, P.A., is a 16 physician multi-specialty Group currently recruiting physicians in the following specialties:

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- FAMILY PRACTICE
- PEDIATRICS

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Darral Mischke, Administrator,
or David Boran, M.D., at
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Ophthalmologist: Medical ophthalmologist to join existing department in expanding multispecialty clinic located in northern suburbs of Minneapolis, Minnesota. Department currently consists of one ophthalmologist, two optometrists, certified ophthalmic and optometric technicians. Full-time or part-time medical ophthalmology practice with limited emergency call schedule. Highly competitive first-year salary guarantee, production-directed compensation, excellent benefits package. Respond with CV to: John Bordwell, M.D., 9055 Springbrook Drive, Coon Rapids, MN 55433; 612/780-9155. *1-8/92

Comprehensive Medical Care: Our progressive primary-based-care multispecialty group currently has the following BC/BE positions available: family practitioner, ob/gyn, dermatologist. We are located in the northern suburbs of Minneapolis, Minnesota. We offer a highly competitive salary, production-based compensation, exceptional benefits package. Respond with CV to: John Bordwell, M.D., Comprehensive Medical Care, 9055 Springbrook Drive, Coon Rapids, MN 55433; 612/780-9155. *1-8/92

Family Practice Physician, BC/BE to join progressive 24-physician multispecialty group practice. Rural setting with metropolitan practice style, 25 miles from Minneapolis. Group has excellent reputation and large geographical referral area. Recently expanded facility is adjacent to newly remodeled 110-bed hospital. Comprehensive benefits package with excellent remuneration. Contact: Joseph E. Van Kirk, M.D., Lakeview Clinic, Ltd., 424 State Highway 5 West, Waconia, MN 55387; 612/442-4461 or 612/446-1295. AA/EOE. 1-8/92

Family Practice—St. Cloud, Minnesota: Established family practice for sale. Share night and weekend call with seven physicians. 1,200 or 2,400 square feet available in new office buildings near hospital. Central Minnesota city of 60,000 serves 165,000 people. Obstetrics is optional. Excellent location for family life, enjoyment of the outdoors, and only 70 miles from Twin Cities. Will consider/negotiate ideal terms and conditions. Reply to: Minnesota Medicine (855), 2221 University Avenue SE, Suite 400, Minneapolis, MN 55414. 1-8/92

Montana Clinic seeking FP/GP for a unique primary care practice. Outstanding hospital and community support. Guaranteed income and excellent benefits package. Every type of outdoor recreation available. No crime, drug, or traffic problems. Call/send CV to: FHS, 4656 Utah, Butte, MT 59701; 406/494-1448. *1-8/92

Family Practice—Internal Medicine: BC/BE physician needed to join seven BC family practice physicians and one BC general surgeon in beautiful northwestern Wisconsin. Clinic facility is attached to hospital and new nursing home. Resort area—many lakes and recreational facilities. If family life and lifestyle are important to you, this is the opportunity. Contact: Stephen Carlson, M.D., or Jeanne Chamberlain, Administrator, Northwest Medical Center, 707 Ash Street, Spooner, WI 54801; 715/635-2151. 1-8/92

Oshkosh, Wisconsin: Medical groups are recruiting in internal medicine, pulmonology, rheumatology, gastroenterology, ob/gyn, family practice, child psychiatry, and ophthalmology. Mercy Medical Center has an active medical staff of 100 physicians in all medical specialties. Oshkosh is an attractive community of 55,000 people, located on the shores of Lake Winnebago and in the heart of Wisconsin's beautiful Fox River Valley (metro area of 400,000 people). University of 12,000 students. Competitive financial packages. Contact Christopher Kashnig, Mercy Medical Center, 631 Hazel Street, Oshkosh, WI 54902. Call 414/236-2430 or 800/242-5650, Ext. 2430. 2-9/92

Family Practice, Southwest Iowa—BC/BE: Excellent opportunity for two FPs to join multispecialty clinic in Creston, Iowa. Ob optional, limited call, progressive 83-bed hospital, competitive salary and benefits package in a family-oriented community. Send CV to Mike Brentnall, Administrator, Creston Medical Clinic, P.C., 526 New York Avenue, Creston, Iowa 50801; 515/782-2131. 4-11/92

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Internist: Regional treatment center interested in full-time BC/BE internist. Forty hours/week. Competitive salary and benefits. Live in the exciting Brainerd Lakes area. Send CV to: Chief of Medicine, Brainerd Regional Human Services Center, 1777 Highway 18 East, Brainerd, MN 56401. *6-1/93

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 The St. Cloud Clinic of Internal Medicine, Ltd.
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 St. Cloud, Minnesota 56303
 612/252-5131

from all departments. Opportunities to learn pharmacological management, acupuncture, peripheral nerve blockade, biofeedback techniques, and other areas related to pain are available. Hennepin County Medical Center is an equal opportunity educator and employer and specifically encourages applications from women and minorities. Application and CV should be sent to Miles J. Belgrade, M.D., Director, Hennepin Pain Clinic, Department of Neurology, Hennepin County Medical Center, 701 Park Avenue South, Minneapolis, MN 55415.

* 2-9/92

Wayzata, Minnesota, Clinic: Ready-to-move-in condition. 1,400 square feet with reception, four exam rooms, X-ray, office, kitchen. Attractive furnishings and leasehold improvements less than year old. Call: Jerry Poehling, Business Manager, 612/341-9220; or evenings: 612/481-0605.

2-9/92

Worried About HealthRight Legislation? Midwestern primary care opportunity offers \$120,000 guaranteed net income plus bonus. Take over existing practice and enjoy coverage and available office space. Enjoy outdoor activities year round in area that attracts hunters and fisherman across the nation. Educational system is state's best. For more information, send your CV to Rob Luxton of HKA Midwest Region, 5420 Southern Avenue West, Suite 407, Indianapolis, IN 46241; or call 800/776-7901, Ext. 2-102. You can also fax your CV to his attention at 317/247-8533.

* 1-8/92

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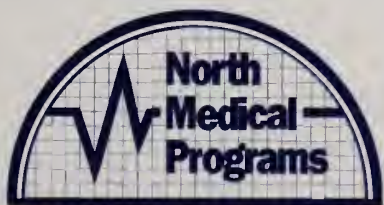
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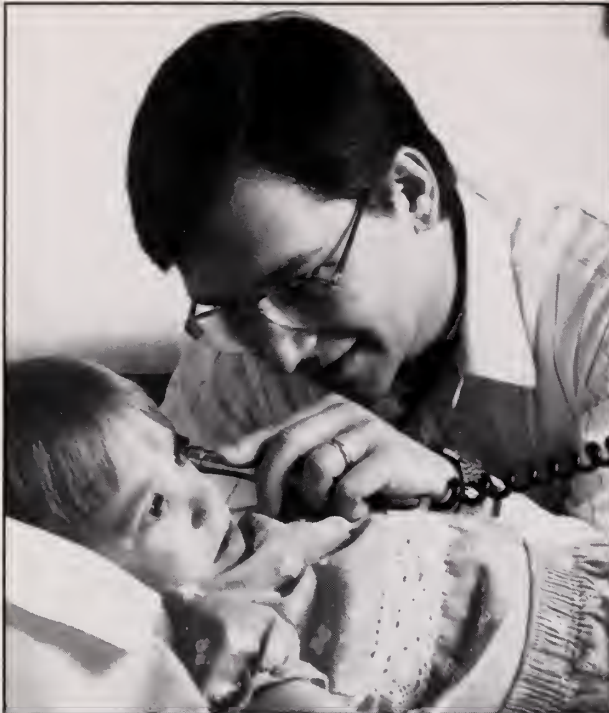
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Minnesota Medicine

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COVER

Women in Medicine have traveled a long path to gain acceptance, says this month's cover story (page 16), an essay about America's first women doctors. Those women and the many who followed them are recognized this month for their achievements.

Cover photo of the operating amphitheater at Woman's Medical College of Pennsylvania (MCP), circa 1911, provided by the Archives and Special Collections on Women in Medicine, MCP, and hand-colored by Rebecca Pavlenko.

MINNESOTA MEDICINE

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MMA Annual Meeting

Schedule of Events

Wednesday, Sept. 23

11 a.m. to 6 p.m.
General registration

11:30 a.m. to 12:30 p.m.
MMSC board meeting & lunch

12 noon to 2 p.m.
Minnesota Women Physicians/
Committee on Women Physicians
luncheon

12:30 p.m. to 3:30 p.m.
MMA Board of Trustees
meeting/lunch

2 p.m. to 3:30 p.m.
MEDPAC annual meeting

2:30 p.m. to 3:30 p.m.
Component medical society
executives meeting

4 p.m. to 5 p.m.
Hospital Medical Staff
Section caucus

5 p.m. to 6 p.m.
AMA open forum

6 p.m. to 9 p.m.
Welcome reception, buffet
dinner, hospitality, and
entertainment

Thursday, Sept. 24

6:45 a.m. to 5 p.m.
General registration

7 a.m. to 7:30 a.m.
Delegate orientation

7:30 a.m. to 8 a.m.
Reference committee
orientation meeting

8 a.m. to 8:45 a.m.
Media briefing

8 a.m. to 9 a.m.
Three simultaneous caucuses:
• Ramsey • Hennepin
• Greater Minnesota

9:15 a.m. to 11 a.m.
MMA House of Delegates (Session I)

11:15 a.m. to 12:45 p.m.
Awards lunch

1 p.m. to 3:30 p.m.
Reference Committee open hearings

3:30 p.m. to completion
Reference Committee
executive session

3:30 p.m. to 4 p.m.
Strategic planning presentation

6 p.m. to 7 p.m.
Pre-inaugural reception

7 p.m. to 10 p.m.
President's Inaugural
Dinner and Festivities

Friday, Sept. 25

7 a.m. to 8:30 a.m.
MMA Board of Trustees
breakfast meeting

8 a.m. to 12 noon
General registration

8:30 a.m. to 10:15 a.m.
Two simultaneous caucuses:
• Ramsey & Hennepin
• Greater Minnesota

10:30 a.m. to 3 p.m.
MMA House of Delegates
(Session II), includes lunch

12 noon
Spouse luncheon

3 p.m. to 3:30 p.m.
Board of Trustees
organizational meeting

—

The President's Inaugural
festivities will recognize Drs.
Thomas A. Stolee and A. Stuart
Hanson as they pass the
Presidential Medallion. The
event will begin at 6 p.m.
Thursday with a pre-inaugural
reception sponsored by Blue
Cross and Blue Shield. The
President's Inaugural Dinner
will follow at 7 p.m.

Northland Inn, September 23-25, 1992

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Women in Medicine

A Promising Future, Despite Challenging Past

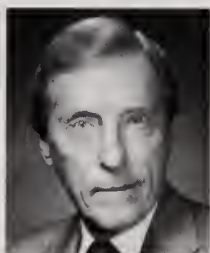
Edmund C. Burke, M.D.

While male physicians can trace their roots in the art of healing to biblical times, women weren't accepted for training as physicians until the mid-19th century. Women had long served as midwives and healers, but even by 1880, only a handful of American medical schools regularly accepted women, and many of those limited their numbers to four or fewer per class. Yet, despite these slow beginnings and halting progress through the mid-1900s, women make up nearly half of today's medical school classes, and they are closing the gaps in all realms of medicine.

To recognize the achievements and leadership of women physicians, the American Medical Association has designated September Women in Medicine month. Many of the women who became physicians in the 19th century were true pioneers. Our cover story (page 16), a historical essay, tells the story of some of these women and what they accomplished—despite the public's uncertainty and strong resistance from established medicine.

In many respects, the discrimination against women physicians has diminished, but women in medicine still face significant obstacles, some of which are discussed in this month's Face to Face interview with three Minnesota women physicians (page 6). Harvard University reported in 1990 that women physicians face greater difficulties than their male colleagues because female doctors are evaluated differently. They lack the guidance and opportunities provided by mentors and have to balance family and professional responsibilities in ways men do not.

While women are widely accepted and respected in medicine today, they nevertheless continue to report



"New pathways are opening for women in medicine."

instances of sexual discrimination, harassment, and gender-based stereotyping, particularly in medical school and residency training. Eighty-one percent of women responding to a 1988 AMA survey of third-year medical students said they had been subjected to sexist slurs. Other respondents reported sexual advances, denied opportunities, and other forms of sexual discrimination.

A year ago, neurosurgeon Frances Conley, M.D., resigned from the faculty of Stanford Medical School alleging she was subjected to sexist remarks and unwanted sexual advances during her 25 years there. Janet Rose Osuch, M.D., a breast surgeon in East Lansing, Michigan, was in her final year of residency at Northwestern University in 1984 when, she says, an attending surgeon told her outright, "Women don't belong in medicine, much less surgery." He said, "All women physicians are hysterical."

Such attitudes have kept women from receiving equal pay for equal work. The annual gross for women physicians was \$148,000 in 1990, compared with \$257,600 for men, according to *Medical Economics*. In

part, this may be because women generally choose lower-paying specialties, such as family practice and pediatrics, and they are newer in practice and younger than their male colleagues. The median age is 42 years for women physicians and 49 years for men, says *Medical Economics*. However, in a comparison of male and female family physicians with three years' experience or less, the Medical Group Management Association found that women had only 84 percent of the income men had—\$87,519 median pay for men in 1990 and \$73,234 for women.

Many people believe women will come closer to equality as more women assume leadership positions in academia and research, although the percentage of women in these areas actually declined between 1970 and 1988. Susan Blumenthal, M.D., chair of the Society for the Advancement of Women's Health Research, says that "for women, their childbearing and childrearing times coincide with the most important productivity times for tenure—the early faculty years. Therefore, alternative flexible pathways must be available to accommodate them."

In fact, new pathways are opening for women in medicine, and the future looks promising. Bernadine Healey, M.D., the first woman director of the National Institutes of Health, says that "despite the barriers we face, I believe we are on the verge of a revolution that will end the outrages and accord women their rightful position in society's most important endeavors. ... More than ever, I am convinced that gender disparities in medical treatment and research will be reduced by increasing the number of women in leadership positions in the teaching, research, and practice of medicine." MM

Women Physicians Break Down Barriers

Minnesota Medicine interviews three women physicians

To recognize the leadership of women physicians, the American Medical Association has designated September Women in Medicine month. The history of women physicians is filled with examples of strong, determined leadership, but women's accomplishments have not come without frustrations and setbacks. Women first began entering U.S. medical schools in the mid-1800s, and by the turn of the century, more than 7,000 were serving as physicians. But as late as 1921, only 8 percent of U.S. hospitals would accept women physicians. In response, women leaders founded medical colleges for women and built dispensaries and hospitals to provide clinical training. Nonetheless, the percentage of women physicians remained relatively the same until the mid-1900s.

The tide turned in the first half of the 1970s as the number of women applying to medical school nearly quadrupled. By the fall of 1989, more than 39 percent of the students entering medical school were women, compared with only 9 percent 20 years earlier, and today nearly half are women. In the following interview, Min-

nesota Medicine talks with three Minnesota women physicians about the changing face of medicine as more women enter the field. Gail Gamble, M.D., a physiatrist at Mayo Clinic, was recently appointed to the 10-member AMA Women in Medicine Advisory Panel, which advises the AMA Board of Trustees. She was speaker of the Minnesota Medical Association House of Delegates from 1988 to 1990 and currently serves on the MMA Board of Trustees. Karin Tansek, M.D., an otolaryngologist at ENT Professional Associates in Minneapolis, was president of Minnesota Women Physicians from 1988 to 1990, is currently an MWP board member, and was recently nominated state representative for the American Medical Women's Association. She is one of only four women ENTs in the state. Jane Haugen West, M.D., an ophthalmologist at Parkway Ophthalmology in Minneapolis, is president-elect of Minnesota Women Physicians. She is also a Hennepin County Medical Society delegate to the MMA, a fellow in the American Academy of Ophthalmology, and a past president of the St. Paul Ophthalmologic Society.



Facing Challenges

Minnesota Medicine: How does medical practice differ for women and men? Do you think women and men physicians face the same challenges and frustrations?

Gamble: Your question is a large one and can be interpreted in many different ways. Do I think medical practice is different for women physicians than it is for men? I certainly hope the relationship we have with patients differs little, if at all. I hope men and women physicians provide the same competent and compassionate care to all patients. However, I do feel there are persisting differences between men and women physicians within the structure of medicine. I think some of these differences are gender related and some are societal related, particularly involving married women physicians who are attempting to combine family and marriage responsibilities with professional careers. For example, these women may face more difficulties in achieving career aspirations involving publishing, tenure, academic promotion, and administrative responsibilities. I don't think these areas are as open to women as they historically have been to our male colleagues. Young women pursuing medical careers are frequently forced to make decisions that pit career goals against family responsibilities. In these early years, family usually wins over career, and by the time a woman reaches her mid-50s, it's almost too late to rise up through the professional career ranks. So, yes, I think there are some problems facing women physicians today, but many are due more to marital status and family issues rather than gender disparities alone. Generally, I believe a woman's career in medicine would not be restricted simply because she is a woman. I think those days are past.

West: Women and men face the same medical challenges, but the practice of medicine is different for women in many ways. It is different in terms of patient care, relations with hospital staff and colleagues, mentoring, practice building, and responsibilities outside of the practice. I think women handle the patient care aspect in a more nurturing manner than men. Relationships with hospital staff are more difficult because of the tradition of the male doctor in the dominant role and the female nurse in the subservient role. Although this is changing, it still remains difficult for some nurses to accept a woman M.D. and for some women doctors to be comfortable as authority figures. It is also very difficult for women to find mentors and, thus, large parts of learning, comfort, and initiation are denied women physicians. In addition, women doctors often find it difficult to break



“Organized
medicine has come
a long way in
bringing more
support to women.”

—Gail Gamble, M.D.

into the traditional old-boy network and, therefore, must rely on other methods of practice building. On top of all this, women are more often the primary homemaker and find these roles to be in conflict.

Tansek: Within a practice, the demands for competency are very similar, but personal demands differ. Women have been shown to have more home and family commitments. They seem to bear more guilt when family and practice conflicts occur, particularly over time allotments. Additionally, women more often must consider dual career commitments—their own and that of a spouse or significant other. In the more traditional medical family, the woman's full-time career is at home with her family.

I believe women with family responsibilities tend to choose careers for which time is more easily structured, for example, opting for a group practice with shared call or an office-based practice with a more definite and consistent schedule. Choice of a career track markedly differs depending on a woman's marital or other relationship status as well as the way she internalizes societal expectations.

Opening Doors

Minnesota Medicine: Do you see improvements in the problems women physicians have faced historically?

Gamble: I think more and more doors are being opened to women physicians, in large part because women are soon going to make up 40 percent to 50 percent of the physician work force. Their talents and contributions to clinical practice, research, and education simply cannot be ignored when they're contributing equally.

West: Yes, but we have a long way to go. The relations with hospital staff have improved the most. In addition, more and more male physicians are willing to accept women as their colleagues, but too many subtle forms of discrimination still remain. In terms of balancing job and family, more flexible work schedules exist, and more men are taking on homemaking roles. Unfortunately, the stresses created by the conflicts between the roles of physician and homemaker can be enough to deprive a woman physician of satisfaction from both.

Tansek: Women traditionally have had to do more to prove themselves throughout their training. They have had to prove their competence, their knowledge, their technical ability, and it has been harder for them to gain acceptance as a minority in a field.

As more women have entered medical school, accessibility has increased for the women following them.

This has resulted in greater choice and opportunity for women entering medicine, and ultimately, more varied career choices. As more women enter obstetrics/gynecology, for example, it becomes much easier for the next generation of women to enter this field. There is a resultant increasing acceptance of them throughout the power structure, both within medical fields and without.

I perceive a greater tendency for networking among women than there was a generation ago. More women's groups are forming within subspecialty groups. Membership is increasing in such groups as the American Medical Women's Association and Minnesota Women Physicians.

Medical training has also become somewhat more flexible. Medical school can sometimes be spread over five years. Residencies can be arranged to be part time or shared. These options didn't exist in the past.

Changing the Profession

Minnesota Medicine: How do you think medicine will change as more women enter the field?

Gamble: Although I stated earlier that we (men and women) treat our patients' clinical problems the same, I think women tend to more routinely fit patients' diagnoses within the larger context of the patients' life situations. Within the nature of the practice of medicine, I think this means that with more women practitioners, there will be an emphasis on the individual social, psychological, and economic impact of disease.

Organizationally, of course, there will be more women at decision-making levels in all aspects of medicine, including practice, education, research, and government. I hope this will mean a real parity in job satisfaction, achievement, and a restructuring of practice to meet the changing needs of women and, frankly, many younger men who are marrying these women as they progress through their careers.

West: When we really get equal numbers of women physicians, the overall quality of care will improve. General caretaking and a concerned listening approach will be used more widely.

Tansek: I think women will bring more patience to medicine, and they can make medical practice more personable. I also believe women, particularly in group practice, tend to be more concerned with the practice of medicine and less concerned with the business of medicine. They also demand more structured time, making it a more likely option for everyone.

Women's presence increases sensitivity to sexism, an



"Greater numbers of women should, over time, reduce the inequities women in medicine face today."

—Jane West, M.D.

issue that has clearly gained greater notice recently, in the wake of the Anita Hill/Clarence Thomas hearings.

I have seen opportunities for women physicians increase, although changes have been particularly slow in some areas. In Minnesota, for example, there are very few women anesthesiologists. Women are also underrepresented in some surgical fields. To my knowledge, in my field, otolaryngology/head & neck surgery, there are only four women in practice in the entire state.

I hope as more women enter medicine there will be increased sensitivity and compassion concerning family issues and stronger advocacy for children's and women's issues.

Reaching Equality

Minnesota Medicine: What sort of changes do you think need to occur before medical practice is equitable for women and men physicians?

Gamble: I feel there are too few women in academic medicine with advanced careers in research and at the top of the medical administrative ladder. I do think this is beginning to change. One of the greatest things I think needs to happen is for the profession to recognize the need for flexibility for all physicians, not just women. Young people of today are trying very hard to balance their private lives with a true commitment to serving others. The days of the devoted clinician working from 6:30 a.m. until 10 p.m. at the expense of family and personal commitments are, and perhaps should be, over. This relates both to men and women; however, particularly during the childrearing years, a woman physician's need for flexibility in her clinical schedule may be even greater, and these needs are going to have to be recognized and accepted as we work in a world with ever larger group practices and fewer opportunities for independent scheduling by female and male practitioners.

West: I think there has to be understanding that the medical school and residency years are also the most likely childbearing years for women. Scheduling during medical training has to allow women, and men, to leave periodically for their family needs. This just hasn't been allowed in the past. The same has to happen for medical practice, generally. If the medical system would learn to accept life's interventions, it would be easier for men as well as women. The change would create a more nurturing environment that would encourage more women to enter, and stay in, the practice of medicine. Greater numbers of women should, over time, reduce the inequities women in medicine face today.

Tansek: More attention must be paid to women's somewhat different needs. More choices must be available for balancing work hours with time for families and for other interests. I feel some people too deeply rooted in tradition must retire or alter their thinking and accept these changes. Wives and daughters will continue to have powerful influence in changing men's sometimes inflexible attitudes.

Management groups must take risks in bringing women through the "glass ceilings" of academics, large medical groups, and various specialty academies. Because women are quite underrepresented in universities, faculty and leaders need to allow women into their tenured system fairly and aid them in procuring research funding and space.

Medical school faculties need to make career choices more open to women. Several medical students locally have expressed concern that women are discouraged from applying for surgical residencies.

Women physicians have traditionally made less income. The reasons for this are multifactorial, but equal pay for equal work is a concept that must be supported.

Finally, for their part, women must take risks they traditionally tend to avoid, from asking questions in large groups to assuming leadership roles. They must learn about the extensive power structure and how to use it and move within it, perhaps forming an "old-gal" network from within. They must accept responsibility, and they must research and learn about options and how to accomplish goals.

Identifying a Role for Organized Medicine

Minnesota Medicine: What could or should organized medicine be doing to support the needs of women physicians?

Gamble: Organized medicine, certainly the American Medical Association, has come a long way in bringing more support to women. As you may recall, there was an earlier day when women were not even allowed to belong to the organization. At this point, the AMA is actively promoting women at all levels of participation and leadership. The AMA is listening acutely to the needs of women, has four women on its Board of Trustees, and has formed a 10-member women's advisory panel to give special counsel to the Board of Trustees about women physicians' needs and the health care issues specifically pertaining to women. If given a chance to go further, I think organized medicine could be quite supportive to women as they search for greater flexibility in scheduling, professional development, maternity leave, etc., not



"As more women enter medicine, there will be increased sensitivity concerning family issues."

—Karin Tansek, M.D.

only in large group organizations but within specialties. Some specialties have come a long way, but others are lagging far behind. Organized medicine can also support promotion of and investigation into women's health issues.

West: Organized medicine needs to make it clear that neither blatant nor subtle forms of discrimination against women will be tolerated and that the diversity brought to the practice of medicine by women is to be valued, not resisted. In addition, organized medicine should take a leading role in developing alternative practice models that address the tensions of balancing work and family. Respect for women physicians as contributing members of the medical profession needs to be espoused by leaders of organized medicine and nurtured throughout the medical community beginning in medical school.

Tansek: Education is key, and it must begin at the earliest levels. Grade-schoolers must be exposed to science and mathematics as career choices. Girls should have the opportunity to learn mechanical and technical skills. Teachers must learn to call on and encourage *all* students in the class-

room. Older students can be encouraged to go on health-oriented tours, for example, to local hospitals or to see how hearing aids are manufactured—in general, to see what medicine is about.

Organized medicine can continue to support women's student groups and encourage women's participation in city, county, state, and national medical associations—efforts that can help women develop leadership and organizational skills. Flex-time and other training options need to be encouraged, as well.

Many fewer women than men are board certified. We need to know why this is and determine how to increase the number of women obtaining this increasingly important credential.

Management and other skill-enhancing courses directed at practicing women physicians would be most helpful. There is a strong sense that organized medicine is a men's club; to change that, it is essential for women to learn leadership and organizational skills and to accept themselves as leaders. Encouraging the establishment of networking skills and systems is essential. One often learns and functions best when someone else reaches out and offers a helping hand as a teacher. Such efforts need strong support at the national level. If they aren't established at the very top of the system, they tend to be done unevenly, or not at all.

MM

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Health Care Reform in Minnesota

Implications for the Rural Physician

Barbara P. Yawn, M.D., M.S., and Roy A. Yawn, M.D.

Minnesota's new health reform plan (formerly HealthRight*) is a large and complex piece of legislation. In addition to articles on cost containment, malpractice hearings, insurance reform, funding, and appropriations, it has two articles that deal specifically with rural practice and the education of rural primary care providers. Many of the provisions in the two "rural" sections are taken from the 1990 House File 2 and were developed in conjunction with the Rural Health Coalition. The coalition spent two years working with nurses, hospital administrators, physicians, senior citizens, representatives of the Minnesota Medical Association, the Minnesota Academy of Family Physicians, the Minnesota Nurses Association, the University of Minnesota Medical School and Hospital, and rural legislators.

Although rural physicians offered significant input to much of the language in the law's rural sections, and most consider it useful, the impact of these sections remains unclear. Any statements made before the rules governing the legislation's implementation are written are speculative. However, such excuses cannot be used simply to lay the bill aside and wait to see what happens. With careful reading of the information contained in the bill and a knowledge of rural practice in Minnesota, it is possible to anticipate potential outcomes. Through such educated speculation, it may be possible to influence the rule-making process to assure that the rules are clearly written and will not result in unintended consequences. This article reviews the sections of Minnesota's health reform plan that pertain specifically to rural Minnesota health

care, and it discusses several other aspects of the bill that may affect rural health care.

Rural Provisions—Article 5

An entire section (Article 5, Rural Health Initiatives) of the new law is devoted to rural issues. The major provisions of Article 5 are outlined in the table.



BOB FIRTH, FIRTH PHOTO BANK

Rural Health Advisory Committee

The bill calls for the formation of a rural health advisory committee, which is charged with developing cooperative health care efforts across regions and throughout the state. Similar charges have been given to the regional advisory and ad hoc regional provider groups mandated by the legislation, except their focus is cost containment. With the recent antitrust actions against non-metropolitan medical groups in the state, physicians worry about coming

together to discuss regional or even local cooperative efforts among groups. The bill contains language that says groups participating in cooperative efforts will be protected from antitrust actions as long as their efforts are related to this bill and as long as certain state groups, such as the departments of health or human services, are kept informed. Can this umbrella truly protect physicians from federal antitrust actions? The attorney general's office says, "yes, with some conditions." Cooperation will be difficult until those conditions are specifically outlined.

Office of Rural Health

The Office of Rural Health is mandated to work with public and private groups, and specifically with the Minnesota Center for Rural Health, which grew out of the Minnesota Coalition for Rural Health. The Minnesota Medical Association holds a position on the center's steering committee.

Time lines for the advisory committee and the Office of Rural Health to complete their activities are a little vague. However, all time lines in the new law are short, requiring Herculean efforts in building the trusting,

*The plan, originally called HealthRight, was renamed MinnesotaCare when a California company notified Minnesota that it already held the copyright to "Healthright." MinnesotaCare was even shorter lived; in early August, the Legislative Oversight Commission, responsible, among other things, for interpreting ambiguities in the new law, chose to give the plan an interim name—Children's Health Plan Plus—and hold a contest at the Minnesota State Fair to select a new name.

respectful, working relationships required of volunteer and advisory boards.

Financial opportunities

In addition to establishing new committees and offices to advise the commissioner of health on rural issues, the bill extends certain financial opportunities to rural hospitals, physicians, and other health care professionals. Will these programs provide the financial incentives necessary to bring new providers to rural areas, or will they merely facilitate the placement of those already planning rural careers? While these programs may provide new financial opportunities for mid-level practitioners and registered nurses for nursing homes, the current financial packages in rural physician recruiting programs are often similar to the loan forgiveness programs created under Minnesota's health care reform plan. The extension of the hospital transition grants program is an important element of the new law, but its impact may be small in an industry that has large, broad-scale problems. Financial support for sole community hospitals is necessary in isolated areas such as Grand Marais; however, the two-year tax relief offered to hospitals that would suffer severe financial difficulties because of the legislation's 2 percent provider tax is only a short-term solution. Will these hospitals be able to pay the tax from increased Medical Assistance reimbursement and increased insurance coverage of the currently uninsured at the end of the two years? Will new cooperative regional programs call for their transition to different types of facilities? Only time and the writing and implementation of the law's new rules will allow us to decide.

Article 5 also includes several provisions responding to specific health care access problems. These provisions call for the creation of databases, require a number of studies, and designate funds to support rural services. Provisions in this section also address the current shortage of rural primary care physicians and nurses. Except for their incredibly short time frames, most of the studies called for in this section appear feasible and useful. For example, the required study of rural physicians who have recently stopped providing obstetrical services should help determine the influence of malpractice, declining birth rates, and problems with shared call and coverage on these doctors' decisions to leave obstetrics.

Education of Rural Providers—Article 6

Article 6 (Health Professional Education) of the new law concerns the education of rural and primary care providers. The legislation requests that the University of Minnesota Board of Regents increase the number of graduating primary care physicians (family physicians, general internists, and pediatricians) by 20 percent by the year 2000. This appears to be an appropriate mod-

ification, but it won't work unless the well-ingrained mindset that values subspecialists over primary care providers in the educational setting changes at the same time. The law also asks the university to develop a family practice residency that places students in rural practice sites for at least their second and third years of training. The search for rural sites has already begun.

Predicting the short-term impact of the rural initiatives contained in Minnesota's health care reform plan is straightforward. The legislation will focus attention on all aspects of rural care, which is likely to improve awareness and perhaps help some rural facilities survive. It might also result in a small increase in the number of rural providers. The long-term implications are less clear. Will we recruit more providers, or will we just make it easier for the ones who would have come anyway? Will we sort out the best and most necessary of the rural hospitals and assure their survival? Can a legislative mandate change Minnesota's medical education system? Can we develop rural, state, and regional health plans that are truly

sensitive to unique rural needs and styles, or only plans that involve the metastasis of large urban practices? While success cannot be predicted, apathy, continued confrontation, and anger will assure failure. Participation in regional planning advisory boards; constructive, focused suggestions for legislative change and improvement; and time spent educating yourself and others regarding health care reform can increase our chances of improving the new law.

General Provisions

The following sections of this paper discuss portions of Minnesota's health care reform plan that are broad in scope but that may have unintended effects on rural medicine.

Data collection

The commissioner of health is required to collect data on all providers' revenues. Physicians must provide revenue data in the format and at the times requested by the commissioner for all income received from patient care. In addition, the commissioner will request data on the use of practice parameters as well as other quality-related data.

Studies of the impact of reimbursement rates, access to prenatal care, and emergency medical services should also include information from private physicians' practices. Although these data are to be collected in the least intrusive way possible, no one doubts that the process will require time, personnel, and money. Because the schedule of required studies cannot possibly be met by existing state personnel, some of the studies will have to be contracted out. How will these contract groups interact with rural practices? How will they collect our data?

“Although rural physicians offered significant input to the law's rural sections, the impact of these sections remains unclear.”

Table

Summary of Article 5—Rural Health Initiatives**Committees/Agencies**

Rural Health Advisory Committee

- cooperative health care efforts
- state rural health plan
- identification of the underserved

Office of Rural Health

- coordination of agencies' rural activities
- clearinghouse of information
- research and innovation in health care delivery systems
- joint recruiting efforts with Minnesota Center for Rural Health

Financial support

Loan forgiveness

- M.D., D.O.
- mid-level practitioners
- RNs for nursing homes

Transition grants for hospitals

Support for sole community hospitals

Two-year tax relief for failing hospitals

Access Issues/Studies

- complete rural provider database
- assess availability of prenatal care
- study impact of reimbursement of mid-level practitioners
- study use of telecommunications
- study reimbursement of life-support transport services
- analyze prepaid ambulance programs

Will they be as non-intrusive as the bill suggests the government should be? A data collection committee that includes six health care professionals will oversee this process. This committee needs input from physicians in rural practice.

In addition to questions related to data collection are those regarding interpretation of that data. Rural and urban data will not look the same. On a per-procedure, per-supply, or per-test basis, rural costs may be higher. But per episode of care, rural costs may be lower. Rural primary care physicians who provide continuity of care may be able to care for patients at a lower total cost per patient encounter—the primary care provider will know the patients and will have to spend less time and money gathering information.

Mandatory assignment

Mandatory Medicare assignment is not a provision of federal physician payment reform. As it is currently written, the resource-based relative value scale continues to allow a limited amount of balance billing of Medicare recipients. Beginning January 1, 1993, physicians will be permitted to balance bill up to 115 percent of the fee schedule amount for nonparticipating physicians. How-

ever, under the state's new plan, physicians in Minnesota will be further restricted as balance billing is phased out according to this schedule: starting in 1994, the limit for balance billing will be 110 percent; by 1995, it will be 105 percent; and by 1996, balance billing will not be allowed. It appears that once again physicians with high proportions of Medicare patients—most rural physicians—will suffer larger losses because of these restrictions. The Legislature should examine this issue again next session. The addition of a means test for balance billing is one proposed solution, but that wouldn't fully compensate the many rural physicians who care for low-income elderly and retired farmers whose assets have been passed to the next generation.

Centers of excellence

Minnesota's new law says that centers of excellence will be identified for complex procedures such as transplantation. Unfortunately, the language of the legislation is so vague that we could be choosing centers of excellence for CT scans (this possibility is reinforced by the modified certificate-of-need language included in the new law), for cholecystectomies, or for care of the patient with an acute myocardial infarction. The use of centers of excellence must be monitored closely to assure it does not further reduce rural citizens' access to health care.

Minimum volume standards

Language in the reform package hints that designating centers of excellence for transplants may be only the beginning. The law asks the health planning advisory committee to "make recommendations to the commissioner regarding minimum volume requirements for the performance of certain procedures by hospitals and other health care facilities or providers." The "certain procedures" are unspecified, as are the minimum volumes or the process by which the minimums are to be ascertained. This provision is most likely to affect rural centers. Certainly, there must be more creative ways to ensure that rural citizens don't receive second-class care!

Prohibition of cost shifting

Prohibiting cost sharing is an excellent idea on paper. However, Minnesota's plan will never cover all unreimbursed care. The 15 percent to 25 percent increase in Medicaid payments will not bring reimbursement up to the level of other payers. How will physicians be able to spend the required time serving on the hospital, nursing home, and peer review committees necessary to meet government requirements and to keep our hospitals functioning? Rural physicians are often even more burdened because they are fewer in number but have the same number of committees. No increase in payments will cover a rural physician's care of a family with three children for the price of one because the family can't afford three deductibles. No reimbursement is planned for the 60 to 90 minutes of phone calls required daily—phone calls that patients often make to replace office visits. The Legislature needs to take an honest look at cost shifting. The historically low Medicaid reimburse-

ment level has been the most flagrant example of cost shifting practiced in Minnesota.

Payment caps and voluntary decreases

Minnesota's health care reform plan requires the state to establish regional "limits" on total public and private health care spending—essentially a decrease in increases. It is difficult to predict how this limit will affect the practice of medicine, and it is not yet clear how those limits will be met. For example, will the groups that see the most patients in a given region sustain the largest cuts? Will the cuts be made on a per physician basis across the entire region? Will the revenue data from small groups be as reliable as that from large groups? Who will decide how the limits will be made, and how will suspicions between groups that not everyone is doing his or her "fair" share be prevented? Establishing and meeting such limits will require collegial honesty, trust, and a realization that we can creatively work together to enhance efficiency and avoid duplication of services.

Managed care emphasis

Minnesota's health care reform plan emphasizes managed care as a method of cost reduction, but what does managed care mean, especially in rural Minnesota, where HMOs haven't been successful. Will managed care programs take patient desires, values, and lifestyles, as well as locally available resources, into account? Rural physicians need to design a rural version of managed care, perhaps through primary care physicians and their office staffs.

Combination of groups for bargaining purposes

Minnesota's reform package includes a provision for the state government to oversee a program called the "Private Employers Insurance Program." This is a "state program to provide the advantages of a large pool of small employers for purchasing health coverage, other coverages, and related services. ..." Will this mean more contracts similar to the State Health Plan? Will large insurer and employer consortiums deal with physicians by determining who can play and which referral sources must be used? Regional physician planning groups could also agree to work in concert during these negotiations if antitrust concerns can be resolved.

Regional planning groups

The new law emphasizes regional health delivery system planning, both by public entities and by private provider groups. While the legislation required a minimum of four regional groups, six have been created. Unfortunately, they do not conform to any current health care, emergency medical services, or Health Department regions. The southwest and northwest regions are large, and travel

distances will be long and difficult. But smaller subgroups may be possible. In addition to the formal regional planning boards, the law allows for groups of regional providers to develop networks and plans to increase efficiency and lower costs. These groups would give

physicians a greater voice in the regional planning process. The opportunity is there for us to take; it may not come again!

Review of capital expenditures

To begin assessing the use of new technologies, Minnesota's plan requires providers to report to the commissioner of health any capital expenditures over \$500,000. Will those reviewing capital expenditures truly understand the needs and constraints of rural medicine? A CT scanner, mental health unit, or CCU may not be as cost-effective in the rural setting because of lower volume of

use. Does that mean we should make rural patients travel great distances for these basic medical services or that we should apply different criteria to urban and rural expenditures? Does it make prices more competitive to allow only one institution to have the equipment when a competitor can justify its need based on volume of use?

Summary

Minnesota's health care reform plan (by any name) is a cost-containment bill with provisions to provide health insurance for some uninsured people, to examine quality of care, to increase support for rural provider education and migration to rural practice, and to develop state and regional health planning procedures. It is an ambitious bill with very tight time frames, vague language, and heavy reliance on regional commissions and volunteer groups that are just now being established. Will it have an impact on rural health care? Undoubtedly, it will. But somewhere between what the bill says and the desired outcome is a void that physicians can help fill with constructive work and criticism. If physicians do not take the lead, someone else will fill that void—nonphysician providers, legislators, bureaucrats, or consumers. Or the structure could implode, taking all of us with it.

MM

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Histological and pathological laboratory, Woman's Medical College of Pennsylvania, 1896.

Women in Medicine

The Tortuous Path to Professionalism

.....

Dorothy M. Bernstein, M.D.

Photographs provided by the Archives and Special Collections on Women in Medicine, Medical College of Pennsylvania

Women in medicine have traversed a long path to establish themselves as professionals. Today they represent nearly 50 percent of incoming medical school classes, but before the 19th century, women physicians in America were a rare species. In the colonies, they assumed the role of physician occasionally out of necessity and circumstance. As midwives traveling through sparsely inhabited rural areas to aid in obstetrical cases, these women faced other medical problems as well, gaining practical experience in treating a variety of medical conditions. Some became skillful in performing minor surgical procedures and in treating patients with available herbs and medications.

In frontier towns and villages, where there was little or no regulation of who practiced medicine, women at times assumed this role out of expediency or as an extension of their nurturing role. In the late 1700s, for example, Mrs. Frances Coombs set up a medical practice in Kentucky, functioning as a physician, surgeon, and obstetrician. Her practice flourished, and her favorable reputation spread beyond the state line. Some women assisted their physician husbands and continued the practices after their spouses' demise.

However, such instances were few and did little to establish women's position as professionals in American medicine. Dr. Mary Putnam Jacobi, a prominent 19th century physician who was also a writer, summarized women's position in medicine at the end of the 18th century. She noted that centuries of tradition had reserved the practice of medicine for men and assigned women the exclusive control of the practice of midwifery, which, presumably, did not require knowledge of the medical arts. As medical schools began to develop and men became trained and skilled in the medical arts, even the most capable midwives were suppressed along with the rank and file of uncultured women engaged in herbal folklore. The midwives, together with the barbers, were excluded from medical training and prohibited from obtaining a degree in the growing number of medical schools.

As Dr. Jacobi stated, "The greater decorum of female midwifery was obliged to yield to the greater safety of enlightened masculine practice."¹ This was true even though women's soothing herbs, lotions, and poultices often were less harmful than the wholesale bleeding, purging, and toxic heavy metals of the "heroic medicine" freely prescribed by the male graduates of the new medical schools. The midwives continued to practice folk medicine-based obstetrics, but men were now summoned for complicated deliveries.

The First Steps:

Harriot Hunt Sets Up Practice

The 1800s brought the first substantial gains for women in medicine in their move toward professionalization, although they encountered significant obstacles along the way. It was in this century that women began to establish a definitive role for themselves as physicians. At first it was as a distant adjunct with little impact upon or recognition from established medicine, as exemplified by Harriot Kezia Hunt, the first woman physician in the early part of the 19th century. By the end of this century, the number of women physicians had increased markedly, and a few came to be considered full-fledged, respected peers by their male colleagues, as was Mary Putnam Jacobi.²

Hunt's experiences illustrate the formidable task women faced in reaching that goal. Hunt, who lived in the early part of the 1800s, was a school teacher in Boston. She had an idealistic desire to live a useful life and felt that aim was not fulfilled by her work as a teacher, a position held in low esteem. Hunt wished to express her

strong belief in independence for women. During this time period, when women were relegated to the home as their chief sphere, there were few ways to fulfill other aims; generally, women could become domestics or teachers.

Harriot Hunt boldly established what became a lifelong medical practice after a frustrating experience with the professional medical community that began in 1830, when her sister Sarah became severely ill. The family physician prescribed an intense course of treatment with leeches, blister raising, and mercurials. Instead of improving, Sarah's respiratory symptoms became more intense. She now exhibited dyspnea, orthopnea, and had a severe cough. The physician sent for a consultant, Dr. William Walker, a respected member of the Massachusetts Medical Society, who diagnosed Sarah's ailment as disease of the heart and sent her to the country to recuperate.

There, her condition worsened after improving slightly. The family physician again prescribed more blistering, leeches, and mercurial acid. He also applied a seton, a bundle of threads passed through an opening in the skin to produce a fistulous tract to encourage healing of inflammation. Hunt thought her sister's treatment seemed truly barbarous. When the physician prescribed prussic acid to be given three times daily, Hunt wrote, "My dread of so dangerous a remedy was openly evinced."³

Hunt was critical not only of the family physician but the consultant as well, in spite of his well-established reputation. The consultant would not communicate at all with family members, who, Hunt pointed out, were the closest observers of the patient's symptoms. He conferred only with the referring doctor, as was the custom of the time. Hunt also observed that physicians wished to be regarded with what she considered undue respect and awe, and she believed the days of such obedience were vanishing. Families were reading works on hygiene and were becoming better informed about medicine. They wanted to know if there was a difference of opinion among the physicians and how they proposed to resolve such differences. She felt that such knowledge would only deepen confidence in the profession, not detract from it, as the doctors of the Massachusetts Medical Society feared.³ When Hunt later became a physician, she made a concerted and successful effort to deal more openly with her patients, an advanced notion for that time.

After three years of intense treatment and mounting medical bills, the doctors continued to offer only a vague



Woman's Medical College of Pennsylvania interns at Philadelphia General Hospital, 1892.



Women medical students perform a dissection at Woman's Medical College of Pennsylvania (circa 1904).

diagnosis of a cardiac condition, and Sarah Hunt was unimproved. Weary of these physicians' methods, Harriot Hunt turned to irregular medical practitioners, who abounded in Boston³ and used more naturalistic treatment approaches developed in antithesis to established medicine's more drastic procedures. She engaged a Dr. and Mrs. Mott, who had recently arrived from England. Although Dr. Mott possessed a medical degree, Boston's established physicians disclaimed him because he advocated botanical medicine and resorted to advertising. The Motts examined Sarah and diagnosed her condition as pulmonary tuberculosis, or consumption, as it was known. They employed botanical medications, and under their moderate care, or coincidentally, Sarah improved and gradually recovered.

Dr. and Mrs. Mott believed in the individuality of women and encouraged what was at first a passing and seemingly impossible idea to Harriot Hunt; they offered to train her as a physician by means of an apprenticeship, which was a common means of educating physicians at the time. Hunt knew that no medical school and no member of the Boston Medical Society would train her, and approaching them was inconceivable. In accepting the Motts' offer, Hunt sought to advance women's independence while serving others with a reformed approach to the medical excesses of the time.

Harriot Hunt and her sister Sarah, whom the Motts also trained, set up their office at the corner of Spring and Leverett Streets in Boston, advertised, and awaited patients. They described their first professional year as one filled with anxieties. They had dared to challenge the traditional role of women by entering the medical profession, and they suffered many slights from their Boston acquaintances. They were the brunt of jokes and criticism from the medical profession as well. The editor of

one medical journal, seeing that Harriot Hunt advertised herself with the title of M.D., published an article implying that she knew little about anatomy. Meanwhile, Harriot Hunt twice attempted to extend her education by applying to Harvard Medical School. The first time, the faculty outright refused to consider admitting her. The second time, when Oliver Wendell Holmes backed her, the faculty admitted her to attend certain classes but left the final decision to the male students, who rejected her.

Sarah Hunt left the practice after a short time to marry, but Harriot persisted and eventually established a large practice. In 1860 she celebrated 25 years of practice at a ceremony attended by 1,500 friends and patients. Her contributions to medicine lay chiefly in her devotion to her patients, who were largely women and children, and in her encouragement of other women entering medical practice. She believed

that male physicians did not stress the importance of hygiene for women, even with patients they had attended for as long as a quarter century. Although the principles of bacteriology and the basis of infection were as yet unknown, Hunt believed women's ignorance about their bodies and lack of health practices accounted for many of their medical problems.

To remedy this, she organized free lectures in her home on female hygiene and physiology. Many women haughtily walked out when Hunt broached the subject of female sexuality, but many others stayed and later became her patients. Hunt was described as a benefactor to women of the lower economic classes because of her lectures on physiology to hundreds of working women. She also made great efforts to support and encourage women who were entering medical practice.

Harriot Hunt, who received only an honorary Doctor of Medicine degree from the Woman's Medical College of Pennsylvania in January 1853, represented the first generation of women physicians of the early 19th century who strove to establish themselves as professionals. Their training was usually by apprenticeship with irregular medical practitioners. Such women were very few in number, and the established medical profession paid little heed to them.

A Milestone: Elizabeth Blackwell Attends Medical School

Elizabeth Blackwell, who persistently sought and finally achieved admission to a regular medical school, represents the next phase in women's march to professional acceptance in medicine. Before seeking admission to medical school, Elizabeth Stone Blackwell worked in Philadelphia's Blockley Hospital caring for women in the

syphilitic wards. Her preceptor there was Dr. Samuel Henry Dickinson of Charleston, South Carolina.⁴ Feeling that her training was incomplete, Blackwell daringly sought entry to a regular medical school. Dickinson tried to aid her efforts by writing to schools in New York, Boston, and Philadelphia, but that attempt failed. Next, he wrote to most of the other U.S. medical schools, including the Geneva Medical College at Geneva, New York. After much deliberation, the Geneva faculty made the unprecedented move of accepting her application but clouded the issue by leaving the final decision to a student vote. Medical schools of the time depended on fees and did little to displease the student body, which was often a boisterous group given to pranks and disruptive antics. Geneva's medical school class decided it would be novel to admit a woman, believing she would never accept. They were wrong, and Blackwell became the first woman admitted to a regular medical school in the United States.

The Boston Medical and Surgical Journal and *The Buffalo Medical Journal* both reported the unusual occurrence. They noted that Blackwell's presence in the classroom resulted in far better observance of decorum than was usual, and the anticipated embarrassment at having a woman in the class when discussing "matters of a delicate nature" soon disappeared. The editors praised Geneva College for opening its doors to a woman.⁵ But despite such commendations, the college refused further applications from women for many years after Blackwell's graduation.

In a later address on medical education, Blackwell recalled the trauma she experienced in obtaining a medical education: "In 1845 when I resolved to become a physician, six eminent physicians, in different parts of the country were written to, for advice. They all united in dissuading me stating 'That it was an utter impossibility for a woman to obtain a medical education; that the idea though good in itself, was eccentric and utopian, utterly impractical.'"⁶ Nor were women of the community any more supportive. When Blackwell entered the Geneva Medical College in 1847, the town ladies pronounced the undertaking "crazy or worse" and declared they would die rather than support a woman physician.

In 1853, when Blackwell attempted to set up a medical practice in New York City, she had the utmost difficulty finding a boarding house that would permit her to place a physician's sign outside. Ladies, astonished that this would be allowed in a respectable establishment, announced they would not reside in a house so marked. Blackwell faced an arduous task in convincing prospective patients to accept her medical services.

She faced barriers erected not only by physicians and patients, but also by medical institutions. When she



Drs. Alice Tallant (left) and Helen Taylor (center) attend to a new mother at Woman's Medical College Hospital, Philadelphia, circa 1911.

presented her more than adequate qualifications to a New York City dispensary seeking an assistant physician, she was refused. When she sought permission to act as a visiting physician in the women's wards of one of the city hospitals, her application was laid aside; the administrator and staff did not consider it worthy of notice. She encountered a solid wall of social and professional antagonism and found herself without the support, respect, or professional contact so important in managing difficult medical cases.

Blackwell solved the problem of office space by buying her own home. In time, her practice grew, although it was limited to women and children. In the end, Blackwell's contributions were notable. In addition to her medical practice, Blackwell opened a one-room dispensary on the East Side of New York for poor women and children. It failed for lack of funds but was eventually reestablished for treating thousands of patients. In 1857 she and her sister Emily, who was a graduate of Cleveland Medical College, were the chief force in raising money to establish the New York Infirmary for Women and Children, the first hospital in the United States staffed by women. The hospital offered them an otherwise unavailable source of advanced training. Later, the Blackwells were instrumental in establishing an associated women's medical college. Although Elizabeth Blackwell eventually moved to England to practice, she continued to communicate with American medical women and offer them her support.

Advancement: Women Enter Medicine in Greater Numbers

Women continued to seek entry into medical schools during the mid-1800s, and they were accepted in increas-

The Founding of Northwestern Hospital for Women and Children

A Cup of Tea for Charity

It was, at first, a social event. The invitations were hand-delivered to the finer homes in Minneapolis. The R.S.V.P.'s were properly returned, the afternoon gowns selected, the transportation to the Friends' Church across town arranged.

Summoned by Harriet G. Walker, wife of the prominent businessman, Thomas B. Walker, it was a mark of social favor to be asked to attend the afternoon session. And out into the November wind, 44 Minneapolis ladies went in 1882, lifting their dresses with kid gloves to avoid icy mud and dirty wooden walkways, and shuddering at the bare trees of an approaching winter.

Little could they know that they were about to become founders of a charity hospital. And that, a century later, their charity hospital would not only survive, but be recognized nationally as a comprehensive health care center.

But as the tea was poured, Dr. Mary Hood got right down to business. In a day when a "lady" didn't discuss disease in public for fear of distressing others, she told horror stories of children suffering from malnutrition, diphtheria, and the dreaded tuberculosis. In a time when it was considered improper for a lady to mention death in any context, Dr. Mary Whetstone explained that women were dying from typhoid and pneumonia—that no one cared for the ones with the most need or "smoothed their dying pillows." Around the room, there were shock and distress. Tea cups sat untouched while the agonies of disadvantaged lives were described in detail too bold for the ears of typical Victorian women. But these 44 women had been selected because they weren't typical. Harriet Walker was convinced they could work together to build a voluntary hospital for the poorest women and children in their community.

And, she was right.

The Little Rented House

One month later, the newly formed Northwestern Hospital for Women and Children moved into a small rented house on 3½ Avenue South and opened its doors. There was barely enough room for 10 patients, two nurses-in-training, and the maids. And the community's needs were greater than any had imagined.



Northwestern Hospital for Women and Children

MINNESOTA HISTORICAL SOCIETY

Within the next few months, the demand for care overwhelmed the tiny hospital and the ladies went out again in search of a more suitable building. A second home for Northwestern was selected for \$3,000 and a down payment made by the following October. In spite of the notion that a lady doesn't have a head for business matters, Mrs. Walker and her friends filed their articles of incorporation that same month, and by doing so they demonstrated their long-lasting commitment to the hospital.

As Mrs. Walker wrote the president's message for their first annual report in 1883, she noted, "It seems like a dream, and almost beyond belief, that the enterprise which but yesterday we were planning, has already seen a year of active life."

Like a dream, it had saved lives and had given desolate families hope. Four years later, in 1887, Mrs. Walker could proudly report that the hospital had built a permanent home on the corner of Chicago and 27th Street for \$36,000.

Caring for the Sick and Poor

Northwestern Hospital for Women and Children was a typical hospital for its day, patterned, some say, after the Woman's Medical School of Philadelphia, Dr. Hood's alma mater. At first, Dr. Hood and Dr. Whetstone were the staff physicians, and they depended on diet, cleanliness, and rest to cure their patients. For many, given the living conditions of poor Minneapolis families, simple care may have been enough.

In their second annual report, Dr. Mary Hood reported that successful cures often depended on skillful practical nursing. "In a disease which baffles medical skill to cut short its course, we depend largely upon nursing to sustain the vital forces and reduce the position to a minimum," she wrote, "and so help nature to gain the victory. In many severe cases our good nursing has come to the rescue; frequent bathing and clean linen, good nourishing food given regularly, the quiet rest induced by the confidence of good care are the secrets of our successful issues."

Reprinted with permission from "Where Quality is a 100 Year Tradition: Abbott Northwestern Hospital, 1882-1982."



Above, Woman's Medical College of Pennsylvania building, North College Avenue, Philadelphia, 1875.

Left, the operating amphitheater at Woman's Medical College of Pennsylvania.

ing numbers, usually in the sectarian or women's schools. Certain proprietary coeducational schools accepted women for their tuition fees, not on principle. As the number of women in medicine grew, the established medical profession began to take note and actively oppose them, often impugning their characters. When in 1871 a group of women sought admission to the American Medical Association, the president, Dr. Alfred Stille, acknowledged during the meeting that women had a right to study and practice medicine, but he predicted they would never become eminent in the field. He said women were too uncertain in judgment, capricious in sentiment, fickle of purpose, and indecisive in action to be fit to practice medicine. He also declared they lacked the moral sense to fulfill a contract.⁷ Certain medical societies, invoking ethical concerns, made it their official policy to forbid members to consult with women physicians.

Despite such opposition, by the late 1800s women's position in medicine was improving. A number of previously all-male medical schools had admitted women and

granted them diplomas. Legislators in three states granted charters to establish medical schools specifically for women, and several hundred women had graduated as physicians from these schools. Haltingly, women gained professional acceptance by the male-dominated medical community, and some were even permitted to follow staff physicians on hospital rounds.

Most of the women medical graduates were engaged in active medical work. Some were assistant physicians in various water cure and other private establishments. Others were employed in large girls schools as teachers of physiology and physicians to the students. A number were itinerant lecturers who provided physiological and medical information to women. The greatest number were serving as

physicians either alone or in partnership with a husband or father. They were beginning to achieve monetary gain and success. There were women in Boston, New York, Philadelphia, and Cleveland earning more than \$1,000 to \$2,000 a year, a respectable sum for the time.

Social acceptance was growing as well. Women physicians began to hold public classes to instruct other women in physiology and hygiene, and such classes were well attended. Several societies were formed by women in the community to raise funds to provide financial assistance to women who wished to study medicine and to educate women medical missionaries.

During this time, established medicine began to recognize certain women for their professional accomplishments. A prime example is Mary Putnam, a graduate of both New York College of Pharmacy and the Woman's Medical College of Pennsylvania who also spent five years in Paris, where she attended the *École de Médecine* and graduated with the highest honors. In 1871 she returned to New York with what Sir William Osler later described as a "Paris medical degree and a training in scientific medicine unusual at that date even among men."⁸ She immediately entered the city's professional life, joining in medical discussions at those medical societies that admitted women. At a meeting of the Medical Library and Journal Association, she presented the first paper given by a woman physician to a medical society in the United States. The paper, on chorea, was published in the *New York Medical Record* in 1872.

In 1880 she became the first woman inducted into the New York Academy of Medicine. She also was the first woman member of the New York Pathological Society. She consulted at major hospitals, taught at the Woman's Medical College of the New York Infirmary, and in 1872 became a professor there. When the New York Post Graduate Medical School opened, Dr. Mary Putnam, who by then was Mary Putnam Jacobi as a result of her



Mary Putnam Jacobi

ty rights. At a memorial service for Jacobi on January 7, 1907, prominent figures, including Sir William Osler, spoke of her numerous contributions to medicine.⁹

A Setback: Accomplishments Fade in Early 1900s

By the closing decades of the 19th century, more than 1,200 women were enrolled in U.S. medical colleges, and more than 7,000 were in practice. In Boston, they constituted 18 percent of physicians.¹⁰ The number of women physicians exceeded all other women professionals combined. Although it appeared that women in medicine were entering a gilded age, all was not well. There were numerous serious deficiencies in their position at this time. A number of the prominent medical schools in Philadelphia, New York, Chicago, and Boston did not admit women. Most women physicians still found their training in sectarian schools, particularly in the homeopathic schools and in the women's medical schools. Among the latter, only four were recognized as having acceptably high standards. Many of the rest lacked such facilities as medical libraries, hospitals, dispensaries, and clinics. They did not have an adequate professorial staff or scholarships for students. Adding to their difficulties, women were excluded from the well-known public hospitals, which played an important role in training clinicians. The great teachers and practitioners were found there, and many scientific papers were based on the records maintained by these hospitals. Some problems lay with the women themselves. For one thing, they were focusing only on obstetrics and not seeking general medical training. Jacobi warned that this could be detrimental when more demanding standards of medical education were established.

Despite women's advancements, the 20th century brought a setback to their earlier accomplishments and a decline in the number of medical schools available to

marriage to the well-known pediatrician, Abraham Jacobi, was appointed clinical lecturer on children's diseases. She was the first woman to hold such a position in a regular medical college. Additionally, she maintained a large private practice, and she wrote six books and more than 100 medical papers. She supported other women doctors and was active in many community activities supporting minority

women. In 1900, Boston had 330 women physicians. This figure dropped until it reached a low of 140 in 1930, and it continued at a level below the 1900 figure until 1973, when it reached 527. The 1910 publication of the Flexner Report, sponsored by the Carnegie Foundation, is often identified as the cause of these declines, but the report merely hastened the closing of these schools. That report described the inadequate instruction offered at many of the schools that, coincidentally, were admitting women. Although many of the women's schools sought to establish the highest standards, they were limited by finances. The move to reform and standardize medical training by eliminating such schools was well under way before the appearance of the Flexner report.¹⁰ The number of homeopathic schools dropped from 22 to nine between the years 1900 and 1927. When Boston University's student body dropped by two-thirds, the administration responded by converting to a curriculum of regular medicine, which attracted more men to apply. The percentage of women in the senior class fell from 29.5 percent in 1918 to 9.9 percent over the next several years and reached none in 1939.¹⁰ Eventually, the Woman's Medical College of Pennsylvania was the only remaining option for women unable to gain admission elsewhere. When other medical schools closed, the regular schools, instead of opening their doors to more women, closed them tighter. Until the 1960s, women accounted for only about 5 percent to 6 percent of admissions to most coeducational medical schools throughout the country. A similar picture prevailed in medical organizations and in academia, where the few women were found in the lower ranks. Internships were difficult for women to find, and women in specialty training were clustered in a limited number of fields such as psychiatry and pediatrics.

The Turnaround: Opportunities for Women Expand

The 1960s and 1970s began the turnaround that continues today. Chief among the forces behind the change was an expanded concept of individuals' rights and their ways of expressing them. It was during this time that President Jimmy Carter stated, "I have an eight-year-old daughter whom I want to grow up knowing she can be a doctor as well as a nurse, a lawyer as well as a secretary, and a president as well as a president's daughter." Legislation such as the Equal Rights Amendment and other affirmative action aided in exerting the pressure needed to initiate change. Other forces, such as increased support from spouses and improved resources for child care, also have made a difference.

In the last three decades, women have made more progress in medicine than they had during the preceding century and a half. Women are entering medicine in greater numbers than ever before. They are found in an

"Certain schools accepted women for their tuition fees, not on principle."

increasing variety of specialties, many completely out of their reach several decades ago. They are assuming leadership positions in academia and in medical organizations. However, like the women of the late 19th century who thought they were in a secure position, they face continuing challenges. They are underrepresented in research. They have not fully defined and developed the skills they need to reach leadership positions in the well-established medical system. They are only beginning to see the need for the closely allied networking that early 19th century women physicians realized was necessary for securing a role in medicine against great odds. Recently, women have made notable gains, but they have not reached parity in medicine. Yet, the possibility of another flourishing age lies ahead. Women in medicine today must base that future on a still-developing but firm foundation. MM

Dorothy Bernstein is a medical historian and a clinical professor of psychiatry at the University of Minnesota. She is currently pursuing an interest in the early women physicians of Minnesota as they established themselves on the frontier and in the developing cities. She is writing

"Recently, women have made notable gains, but they have not reached parity in medicine."

about "The Original Thirteen," the founders of the American Psychiatric Association, as the sesquicentennial for that organization approaches. She is also contributing historical information to the American Academy of Child and Adolescent Psychiatry as it faces its 40th anniversary next year.

References

1. Meyer AN, ed. Woman's work in America. New York: H. Holt and Co., 1891.
2. Bernstein DM. Professionalization of nineteenth century women physicians: from adjunct to colleague. [Thesis.] Minneapolis: University of Minnesota Graduate School, 1988.
3. Hunt HK. Glances and glimpses: or fifty years social including twenty years professional life. Boston: John P. Jewett and Co., 1856.
4. Females attending medical lectures. Bost Med Surg J 1847 Dec 15; 37(2):405.
5. Packard F. History of medicine in the United States. Vol. 2. New York: Hafner Publishing Co., 1963.
6. Blackwell E, Blackwell E. Medicine, professions for women. New York: W. H. Tinson Printer and Stereotyper, 1860.
7. Minutes of the twenty-second annual meeting of the American Medical Association. Trans Amer Med Assoc 1871; 22:1-43.
8. "Miss Putnam." Med Rec 1871 Mar 1 to 1872 Feb 15; 6:335.
9. Truax R. The doctors Jacobi. Boston: Little, Brown, 1952.
10. Walsh MR. Doctors wanted, no women need apply. New York: Yale University Press, 1977.

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Twin Cities Health Care Mergers, Acquisitions, and Affiliations

Implications for Independent Physician Practices

Douglas A. Shaw and Thomas W. Hoban, M.S.P.H.

"The health care system in Minnesota, especially in the Twin Cities area, is currently undergoing change that can best be characterized as a consolidation of providers into larger and larger groups (multispecialty clinics, hospital/physician mergers, and expanded HMOs and PPOs). These changes are intended to produce economies of scale, less duplication of services, and better control of costs and quality of health care.

Where does this leave the more traditional, smaller multispecialty or single-specialty practices often referred to as 'independents'?... How can independent groups respond to these trends in order to survive in the new health care marketplace?"

—Andrew J. K. Smith, M.D., chair,

Minnesota Medical Association Board of Trustees, 1992.

Almost seven years ago, the Hennepin County Medical Society foretold of these same changes in a white paper describing a medical care system that potentially would be controlled by a few large medical service corporations.¹ Because of the continuing pressures on practicing physicians due to the rapidly changing health care environment, organized medicine in Minnesota is examining current trends in the organization, delivery, and financing of health care services. The Minnesota Medical Association and the Hennepin and Ramsey county medical societies are analyzing these trends to assess their impact on independent physician practices and developing strategies to enhance physicians' effectiveness in what has become a highly competitive environment.

Health Care Trends

Current trends in the organization, financing, and delivery of health care services suggest at least eight major developments are occurring that will have significant implications for independent physician practices in the Twin Cities:

1. Health plans, large multispecialty group practices, and hospital systems continue to consolidate

into fewer large payer and/or health care delivery organizations. Through horizontal (e.g., geographic) and vertical integration (e.g., mergers or other affiliations of large medical groups with hospital systems), these newly aligned organizations will attract purchasers of health care services who are interested in one-stop shopping.

2. Most patients seen by physicians in the Twin Cities area will continue to be members of (or insured by) managed care networks (e.g., health maintenance organizations, preferred provider organizations, and other tightly managed health care delivery systems). Purchasers of such services will seek relationships with a preferred health plan or managed care network and will move away from multiple health plan offerings. This phenomenon—known as "carrier replacement"—will result in a renewed flurry of requests for the transfer of medical records.

3. The influence of the public sector as a major purchaser of health care services will become even greater in the 1990s. The state's recently passed health care reform plan (formerly called HealthRight) gives all employers, regardless of group size or location, the right to obtain health

care insurance through the Public Employers Insurance Program, administered by the Department of Employee Relations, which will join the Department of Human Services (including Medical Assistance/General Assistance Medical Care) and the Minnesota Comprehensive Health Association in deciding how hundreds of millions of dollars will be spent for health care services in Minnesota.

4. Data systems will become increasingly important as a tool for measuring the cost, utilization, and outcomes of health care services. Health plans and purchasers (e.g., large self-insured companies and government) will develop or acquire access to data for use in making purchasing decisions—that is, which physicians and other health care providers will and will not provide care to their members and employees.

5. The "open panel" managed care networks (e.g., Blue Cross and Blue Shield, Medica) will initiate efforts to reduce the size of their provider networks in order to compete more effectively with "closed panel" networks on the basis of price as well as patient outcomes and quality.

6. "Physician payment reform," enacted as part of the federal government's Omnibus Budget Reconcilia-

tion Act of 1989, will trigger similar efforts by other payers seeking to harness rising medical care costs.

7. Other legislative initiatives at both the state and federal level will seek reforms in the health care system that will combine an aggressive competitive marketplace with an enhanced regulatory environment. Mandatory participation in government-funded health plans, mandatory assignment of benefits (e.g., no "balance billing"), and new taxes on providers' billings or net revenues cast an ominous shadow over physician practices.

8. An additional array of regulations affecting medical practices will appear in such forms as technology assessment, the resurgence of certificate of need processes, and programs aimed at protecting the health and safety of patients and health care workers. These regulations will add administrative and cost burdens to the already complex business of managing a medical practice.

Many of these trends and related developments—both locally and nationally—are discussed further below.

The bottom line is that health plans and major purchasers of health care services are demanding more cost containment and evidence from physicians and other providers that services are being delivered efficiently and with good outcomes. These goals will be pursued vigorously through heightened competition and, paradoxically, increased regulation. Larger, well-managed, integrated health care delivery systems are positioning themselves to respond to these challenges. Smaller, isolated physician practices will at best be frustrated and may well find their very existence in jeopardy.

Discussion

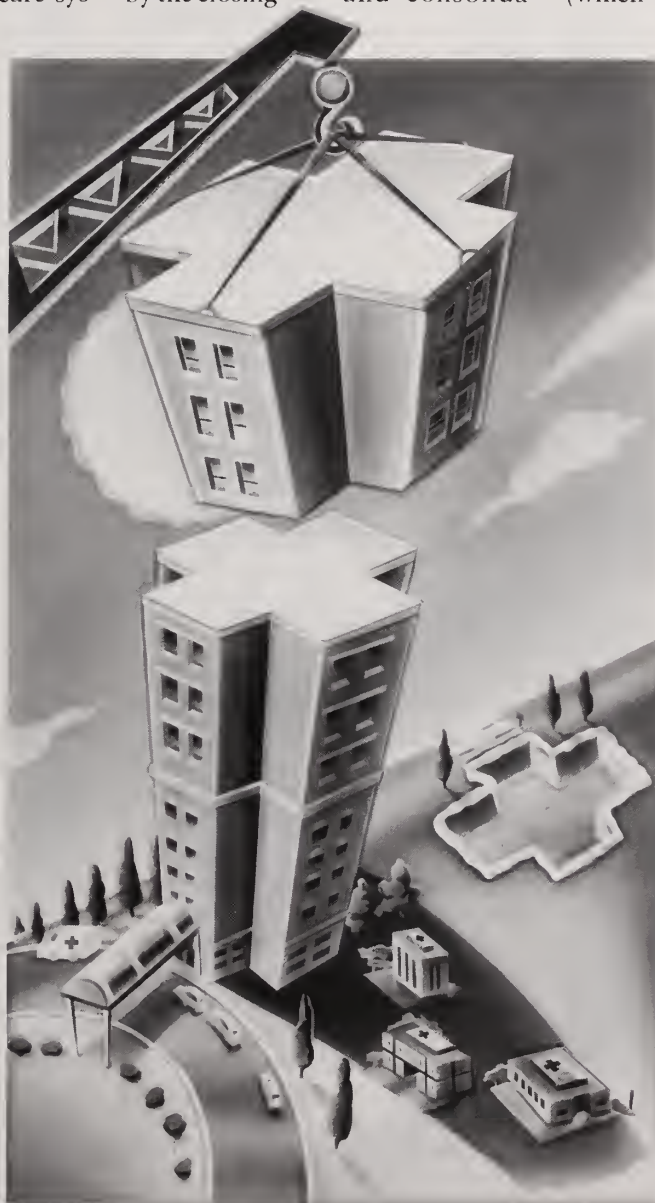
Consolidation

The second half of the 1980s and the early 1990s has been a period marked by the closing and consolida-

hospital system in the Twin Cities will consist of three multi-hospital systems—LifeSpan, Fairview, and HealthEast will own or manage most hospitals. Only Methodist Hospital (which is currently affiliated with LifeSpan), North Memorial Medical Center, and a few specialty hospitals and smaller hospitals serving outer-ring suburbs remain "independent" (Table 1).

Donald Wegmiller, president and chief executive officer of HealthOne Corporation, made the following argument recently in a special health care insert to *CityBusiness*: "In the 1990s, health care in the United States will see a return to community benefit as the yardstick for measuring the ultimate value of a health care delivery organization." He further argued that hospital system consolidations are the best way to obtain efficiencies, by creating organizations capable of providing a "seamless" pattern of care that spans from ambulance services to home health care to nursing homes. Regional organizations, he said, can better address access and technology duplication concerns and can forge closer bonds between physicians and hospitals.³

Local HMOs have also been undergoing consolidations. In February 1991, two HMOs, Physicians Health Plan and SHARE Health Plan, joined forces as Medica, whose combined enrollment of more than 540,000 members makes it one of the largest HMOs in the country. Earlier, Blue Plus absorbed MORE Health Plan (Iron Range), the Primary Care Network, and Coordinated Health Care, while the relatively small Senior Health Plan merged with Northwest-



ILLUSTRATIONS BY CINDY LINDGREN

tion of a number of health care institutions and organizations. Affected by increasing economic pressures, a greater reliance on managed-care techniques, and changing demographics, inpatient hospital days decreased approximately 12 percent in the Twin Cities between 1984 and 1990.² The resulting shakeout of the hospital system has been dramatic. With the pending consolidation of LifeSpan and HealthOne, the private

Table 1

The New Order of Private Twin Cities Hospitals

LifeSpan	Fairview	HealthEast
Abbott Northwestern	Fairview Ridges	Divine Redeemer
Mercy	Fairview Southdale	Midway
Minneapolis Children's	Riverside Medical Center	St. John's
Medical Center		St. Joseph's
Unity		
United & Children's of St. Paul		
Independents	Closed	
Gillette Children's	Abbott	
Golden Valley Health Center	Bethesda Lutheran	
Lakeview Memorial (Stillwater)	Eitel	
Methodist (currently LifeSpan member)	Fairview Deacon-	
North Memorial	ess	
Ridgeview Medical Center (Waconia)	Metropolitan-	
St. Francis Medical Center (Shakopee)	Mount Sinai	
	Mounds Park	
	St. John's Eastside	
	Samaritan	

ern National Life Health Network. Also under active consideration is some form of affiliation involving Group Health, Inc., MedCenters Health Plan, and the large, multi-specialty group practice, Park Nicollet Medical Center.

Mergers have not been limited to hospitals and health plans. The trend toward horizontal integration of the health care system has also seen a growing number of medical practice mergers and acquisitions. Often, these new, larger medical practice organizations have secured a strong presence and niche for themselves in the medical marketplace.

Others believe there is an even better model for consolidation. Instead of a so-called horizontal affiliation that merged hospital systems or medical practices would create, some argue for a vertical consolidation. Vertical combinations involve mergers between differing entities within the same industry, such as a hospital and a medical clinic. In fact, for several years now, there has been an ongoing effort by hospitals to acquire medical practices, leaving more physicians employed by hospi-

tals and more practices owned by hospitals. A consolidation of Methodist Hospital with the Park Nicollet Medical Center, announced publicly in November 1991, would create the first private, integrated health care system of this type and size in the Minneapolis area.

These developments provide obvious economies of scale, but perhaps even more important, they put the larger group practices, hospitals, and health plans in a better position to respond to buyers who want to move away from multiple health plan offerings. The development of large integrated health care systems reflects strategic moves to expand and/or enhance patient care services in a way that is attractive to patients and large purchasers of health care services.

Managed care systems

Since the early 1970s, Minnesota has been recognized nationally as a leader in the development of health maintenance organizations (HMOs), preferred provider organizations (PPOs), and other managed care systems. According to a recent InterStudy re-

Table 2

HMO Enrollment—Metro Area^{5,6}

1991	1,021,855
1990	992,959
1989	928,894
1987	967,862
1985	810,260
1980	391,865

port citing July 1, 1991, data, Minnesota ranks among the top 10 states in terms of HMO enrollment, with a combined statewide membership in excess of 1,265,000. With 28.9 percent of Minnesota's population enrolled in HMOs, our national ranking on this measure is even higher.⁴

HMO enrollment reported annually to the Minnesota Department of Health has grown significantly since 1980. In 1991, metro-area HMO enrollment exceeded one million members for the first time, an increase of approximately 10 percent since 1989^{5,6} (Table 2).

When considering the impact of managed care systems on physician practices, the emergence of PPOs and the AWARE/AWARE Gold product line by Blue Cross and Blue Shield of Minnesota cannot be overlooked. Preferred One, Family Health Plan (now Ethix Midwest), Midwest Health Network, and SelectCare, all PPOs, report a combined enrollment of more than 500,000 members, virtually all of whom are in the metropolitan area. Similarly, a significant portion of Blue Cross and Blue Shield's members are now covered by plans that feature preventive care, provider networks, cost-sharing, and health care management. The Blues locally reported an enrollment, exclusive of Blue Plus, of slightly less than one million members for 1991 and health care management and cost containment savings of \$422 million for that same year.⁷

Managed care systems today serve an even broader segment of Minnesota's population through managed care service programs available to large self-insured employers, government health plans such as Medicaid, and the Minnesota Comprehensive

Health Association (MCHA) program for persons who would otherwise be uninsurable. Since 1990, the health care of MCHA's 30,700 enrollees has been coordinated under Blue Cross and Blue Shield's AWARE Gold managed care systems. Also, as previously mentioned, private employers who obtain their health insurance through the state Public Employers Insurance Program likely will be covered under the policies and programs of a managed health care network.

Managed care has become the dominant form of health plan. Indeed, a study by the Health Insurance Association of America, published in the journal *Health Affairs*, reports that only 5 percent of those in employer-sponsored group plans are still covered by indemnity insurance without utilization management.⁸

Buyer coalitions

Concerned with rising health care costs, businesses large and small are banding together to discuss radical changes in the way health care is delivered in Minnesota. In addition to the recently dissolved Minnesota Coalition on Health, representing 75 businesses, 16 labor unions, and a number of hospitals and physicians, other more aggressive business coalitions have been formed to spearhead reforms in the health care system. Two groups desiring to slow the growth in health care spending and improve the quality of care are the Employers Association of Minnesota and the Business Health Care Action Group.

The Employers Association of Minnesota buyers' coalition, representing 160,000 employees and dependents at 363 small- and medium-sized Minnesota firms, recently selected The Prudential Insurance Company to provide health insurance for member firms. The group issued a request for proposal (RFP) with the intent to use its collective buying power to select a single "vendor" to organize, deliver, and manage health care services. The expected implementation date for this program is January 1, 1993.

The Business Health Care Action Group consists of 14 major employ-

ers from Minneapolis and its suburbs and represents 120,000 employees and dependents. This group also issued an RFP and has selected Group-Care Consortium, which includes Group Health, the Mayo Clinic, MedCenters Health Plan, and Park Nicollet Medical Center, to provide medical care.

**"Smaller, isolated
physician practices
may well find their
very existence in
jeopardy."**

Another organization, Minnesota Business for Health Care Market Reform, consisting of 100 small- and medium-sized Twin Cities businesses, is operating with a volunteer staff and has not yet set an agenda.

Working with the national health care benefits/actuarial consulting firm of TPF&C (Towers Perrin), the Business Health Care Action Group issued an RFP requiring that providers have the ability to:

- deliver high-quality service cost-effectively (with quality defined as conformance to customer expectations based on practice parameters, outcome measures, and patient satisfaction);
- eliminate unnecessary and inappropriate care;
- objectively document continuous improvement in health care service delivery and outcomes;
- offer an integrated system of care that emphasizes continuity and coordination between the various health care providers; and
- manage the totality of care required by employees and their families, with particular emphasis on primary care services and coordination between inpatient and outpatient care.

The buyers' coalitions have publicly indicated that their efforts go well beyond trying to bargain for better rates; they are also trying to

apply the industrial principle of continuous quality improvement to what they perceive to be a splintered, complex, overutilized, and costly system.

The buyers' coalitions made it clear that the provider networks may have to be reconfigured to meet the coalitions' expectations. For example, the coalitions want physician participants in managed care networks to be selected on the basis of documented cost-effectiveness. For employees and their dependents, the new order envisioned by the buyer coalitions will mean fewer choices of health care plans, more limited provider selection, and in all likelihood, higher out-of-pocket costs as deductibles and copayments become prevalent for nonpreventive care services.

The buyers' coalitions already are spurring changes among health plans and providers in the Twin Cities. Two organizations—Group Health, Inc., and MedCenters Health Plan—recently announced their intent to pursue a joint venture to combine resources and create a computerized record system that would allow them to provide the measures of service and quality sought by the employer groups.⁹ Park Nicollet Medical Center would be a major provider to this partnership. (In addition, these three organizations plus the Mayo Clinic in April formed a nonprofit organization, called The Institute for Clinical Systems Integration, to implement quality improvement and appropriateness guidelines and to measure patient care outcomes.)

The possibility that buyers' coalitions will by-pass existing health plans to purchase health care services directly from selected providers with the help of an administering agency means it's no longer business as usual. The stage is set for larger, well-organized provider organizations or networks to step forward to bid for large blocks of the Twin Cities health care market.

Some common themes are emerging from the purchasers of health care, including a demand that comprehensive data systems be available to measure and monitor the cost, utilization, and outcome of health care services. They expect to have access to provider-specific data for

services rendered both in and out of the hospital, and they may well make use of this information in selecting managed care systems and/or physicians and other providers participating in such systems.

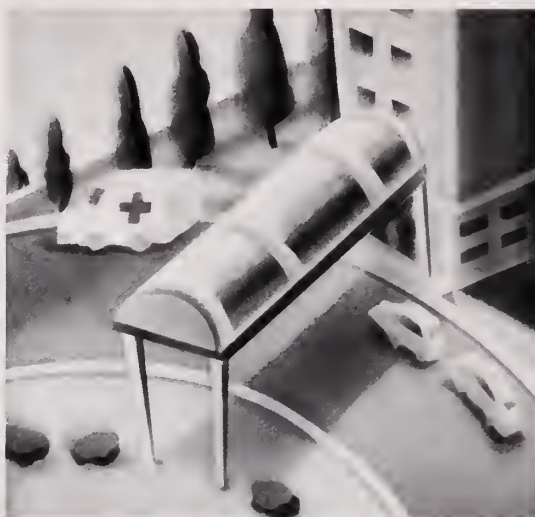
Provider network

Increasingly, the desire for geographic access to health care services can be at odds with managed care systems' cost-containment efforts. The continued growth and success experienced by such health plans as Blue Cross and Blue Shield with its statewide network involving virtually all physicians in private practice, and Medica Choice, which boasts a network of over 4,000 physicians, also comes at a price. The Minnesota Department of Health 1990 HMO Statistical Report, for example, compares "base" premium rates calculated by HMOs for their products.¹⁰ Medica Choice, offering its members a wide array of physicians, had a single rate ranging from 13 percent to 22 percent higher than the rates of Blue Plus, Group Health, Inc., and Medica Primary (formerly SHARE), all with more limited provider networks.

All managed care plans are vigorously investing time and dollars to develop effective systems for measuring and evaluating the delivery of care. They are offering these systems as part of the marketing package used with employers and other group purchasers of health plans. But it is more than a marketing gimmick, as pointed out by the chair and chief executive officer of Medica, K. James Ehlen, M.D., who stated, "We will hold all of our participating physicians and clinics up to their own high standards of care. We will then incorporate [Medica-generated guidelines] as one of the factors used in determining whether a doctor or clinic will participate or continue to participate in our network."¹⁰

There are increasing indications that even the so-called open panel programs will begin to trim the number of physicians participating in their networks, using data systems and

accompanying practice guidelines to identify physicians judged to be most cost-effective in their patterns of care. Health plans will also continue to develop and promote "triple-option" and "point-of-service" products, in which patients are rewarded with enhanced benefits and/or lower out-of-pocket costs when they utilize



physicians or clinics selected from preferred provider lists.

Physician payment reform

In response to a Congressional directive passed in December 1989, the federal Health Care Financing Administration developed a new approach to physician reimbursement using a relative value-based fee schedule for services rendered. Fundamental reform was considered necessary to harness the rising cost of Medicare Part B. The previous system, which paid physicians based on their historical customary charges and the prevailing charges in their locality, was criticized because: 1) it created an incentive for physicians to raise their charges each year; 2) it created wide, and sometimes unexplainable, fluctuations in payment levels for the same service in different geographic localities, including regions of the same state; 3) it resulted in wide variations in payment for the same service performed by physicians of different specialties; 4) it distorted Medicare payments because it did not account for the physicians' time and intensity of effort in rendering

the service; 5) it did not adequately protect beneficiaries against excessive "balance billing"; and 6) it allowed physicians to circumvent payment control efforts by rendering a greater volume of services.¹¹

The term physician payment reform is commonly used to refer to various provisions of the Omnibus Reconciliation Act. Together, these provisions make sweeping changes in the way payment for physician services is determined by Medicare Part B. Physician payment reform has four general components:

- Payment for physician services will be based on a fee schedule. The fee schedule will be set up using a "resource-based relative value system" that considers: 1) the amount of work necessary to render the service; 2) the costs physicians incur in rendering a service; and 3) the variations in practice costs between different areas of the country. In Minnesota, the RBRVS fee schedule will be adopted statewide, eliminating reimbursement differentials between geographic regions of the state.

- Medicare Volume Performance Standards have been established to monitor annual increases in Medicare Part B benefit payments for physician services, and when deemed necessary, payment levels for future years will be adjusted. The establishment of performance standards was the most debated and controversial provision of the physician payment reform legislation because it represented the government's first significant attempt to address the appropriateness of annual increases in the volume of physician services received by Medicare beneficiaries.

- Various beneficiary financial protections have been established. New balance billing limits, known as limiting charges, became effective January 1, 1991, for unassigned claims filed by nonparticipating physicians.

- Finally, the reimbursement and medical policies utilized by Medicare carriers will be substantially more standardized. These changes, among other things, affect the coding system used by physician offices to report

procedures rendered. Medicare reimbursement and medical policies will become standardized nationally so that, for example, the services included in a gallbladder procedure are the same regardless of where the procedure is done.

The impact of physician payment reform on a physician's practice will vary greatly depending on the specialty of the practice, locality, participation status, and the customary/prevaling reimbursement limits previously in force. Generally, the amount paid by Medicare under Part B changed beginning January 1, 1992. The intent was to redistribute the same amount of money that would have been paid out under the previous system. In some cases, reimbursement has gone up; in others reimbursement has dropped. Many procedure-oriented specialties have seen significant reductions in Medicare reimbursement. The new policies also required changes in the way claims are coded when submitted for payment.

It can and should be assumed that other government and private insurance programs and managed care programs will monitor the reforms initiated under Medicare Part B and may adopt similar changes in their own systems. Third-party payers are likely to move toward national standardization in their approach to the coding of physician services and in the policies related to physician reimbursement.

Minnesota health care reform legislation

The 1992 Minnesota Legislature adopted a far-reaching health care reform/cost-containment bill originally called HealthRight (the state is seeking a new name after learning that a California company owns the copyright to "Healthright"). This legislation soon became an aggressive cost-containment initiative, although it was originally intended to bring long overdue reforms to the insurance industry, with particular emphasis on improving access to insurance coverage by smaller employers and the uninsured segment of Minnesota's population.

Proponents of the legislation ar-

gued that its potential cost (estimated by Department of Human Services statistician George Hoffman to be as high as \$1 billion by the year 2000), would require the implementation of rigid cost-control measures. Among other suggestions was re-instituting a certificate-of-need-type system to review and approve capital expenditures by providers for new or expanded facilities and equipment.

"The stage is set for larger provider organizations to bid for large blocks of the Twin Cities health care market."

Although this specific proposal was modified and watered-down in the final legislation, a new state commission will be formed to evaluate the need for such developments in the future.

In the meantime, ominous new taxes were included in the health care reform legislation and are expected to raise approximately \$254 million by 1997 to cover basic health care services for about 158,000 eligible people. Those taxes are:

- a 5-cent-a-pack cigarette tax (July 1, 1992, through January 1, 1994);
- a 2 percent surcharge on hospital services (starts January 1, 1993);
- a 2 percent surcharge on services provided by physicians, dentists, and other providers (starts January 1, 1994);
- a 1 percent premium tax on HMOs (starts January 1, 1996); and
- a 1 percent tax on nonprofit insurers, including Blue Cross and Blue Shield (starts January 1, 1996).

The surcharge on services rendered by physicians is to be computed based on the gross revenues of the practice, allowing deductions for Medicaid, Medicare, GMAC, Minnesota's new plan, and uncompen-

sated care costs.

The legislation permits the surcharge on hospital services to be passed back to third-party payers in the first year. Thereafter, hospitals, physicians, and other providers will be prohibited from passing the new tax on to payers or patients. In effect, this tax will result in a net reduction in the fees available to physician practices to support office overhead and the salaries of physicians and other support personnel.

Equally important, the new law also:

- Establishes mandatory Medicare assignment. This provision will be fully effective in 1996, when Medicare reimbursement will be higher. It prohibits providers from charging Medicare recipients more than the Medicare allowable rate.

- Requires mandatory participation in the state's new plan as well as Medical Assistance and General Assistance Medical Care for physicians receiving any reimbursement for treating state employees or patients enrolled in MCHA or covered by workers' compensation. "Participating" physicians will be prohibited from balance billing of patients and, with some limitations, must accept new patients from these programs. These provisions are effective October 1, 1992.

- Establishes state and regional boards to recommend limits on growth in health care spending. Growth must be limited by at least 10 percent per year for five years beginning in 1993.

- Calls for anti-kickback rules to be developed regulating arrangements whereby health care providers benefit financially from making referrals or recommending a particular service. In the interim, Medicare fraud and abuse regulations will be subject to state, as well as federal, enforcement. Violation of anti-kickback statutes has been classified as a felony.

- Requires the commissioner of health retrospectively to review capital expenditures and major spending commitments (more than \$500,000) by providers, particularly those involving an expansion of service capability. The legislation excludes the remodeling or replacement

of existing buildings and fixtures from review. Failure to comply with the review process could subject the provider to prospective review for five years.

- Requires the commissioner of health to establish a health care analysis unit and to begin collecting health care data from providers and group purchasers of health care services. Specifically, the commissioner is required to begin developing outcome-oriented practice parameters and to establish a large-scale database focused on a limited number of conditions. Failure to provide data could result in fines and subject the provider to disciplinary action.

- Calls for the establishment of a new health planning advisory committee to make recommendations regarding such things as high-cost technologies and procedures. The committee will develop criteria for evaluating new technologies and may recommend minimum volume requirements for certain procedures.

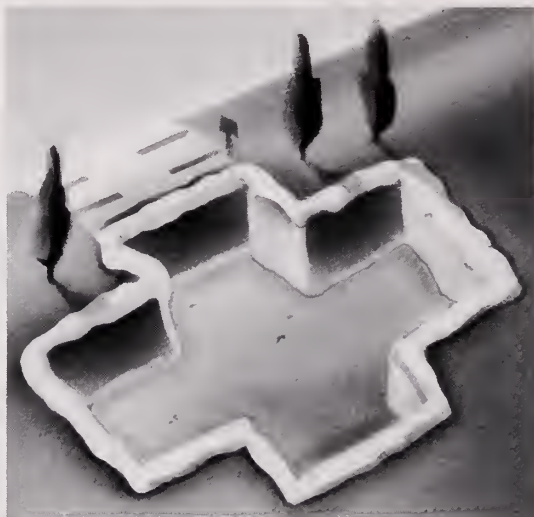
Antitrust considerations

The Minneapolis-based *Star Tribune* headlines recently declared "Three to pay in boycott, price-fix case." Similar to earlier cases involving Mankato and Alexandria hospitals and physicians, the most recent effort spearheaded by the state attorney general focused on the hospital and more than 100 physicians in St. Cloud and surrounding areas. The hospital and physicians were accused of organizing to boycott two of the state's largest HMOs and to fix fees illegally.

Settling out of court, while denying all charges, the providers have agreed to pay a \$200,000 penalty and provide \$1.1 million in free care over the next five years for the uninsured and underinsured. In addition, the health care organizations formed by the hospital and physicians will be dissolved as soon as the free care has been delivered. The attorney general insisted that the doctors and hospital designed an illegal system to help control their profits and that it was

done "at the expense of health care consumers."

The challenges issued by the Minnesota attorney general are not unlike the scrutiny federal enforcement agencies periodically direct toward PPOs and other more loose-knit physician organizations elsewhere in the country (particularly those operat-



ing in managed care markets). Significantly, such scrutiny has focused on the manner in which physicians in these organizations establish or negotiate their fees. The typical scenario involves a payer who initiates a legal challenge or, more commonly, complains to the federal enforcement agencies when it is unable to reach what it considers a good deal with physician members of a physician organization.¹²

It should be noted that the types of legal challenges summarized above involve partially integrated physician organizations where participating physicians continue part of their practice outside of the physician organization. In contrast, fully integrated physician organizations, such as group practice professional corporations that negotiate with third-party payers as a single, unified practice, have not encountered these same legal difficulties. Fully integrated physician organizations can clearly establish a fee schedule pertaining to all members of their medical staffs and can take a uniform position on the prices offered to third-party

payers.

It is this very dilemma that has periodically given rise to the introduction of resolutions in the Minnesota Medical Association House of Delegates calling for legislative relief that would provide physicians in partially integrated practice organizations with more flexibility and legal

protection when bargaining with managed care systems. The state's new health care reform plan includes an "antitrust exception" that requires the commissioner of health to establish criteria and procedures for sanctioning contracts, business or financial arrangements, or other activities or practices involving providers or purchasers that might be considered violations of state or federal antitrust laws but that are in the best interests of the state in pursuing the new law's policies and goals.

Notwithstanding the desire of many physicians in smaller single-specialty or even multispecialty groups to band together in order to achieve a more level playing field in the marketplace, antitrust concerns still loom real and must be carefully considered. However, antitrust concerns do not preclude physicians in independent practices from participating in cooperative efforts to enhance patient access to quality health care services. Providers should seek and heed the advice of attorneys skilled in such matters.

Survival Strategies

If independent physician practices, now organized as smaller single or multispecialty groups, hope to survive and thrive in the environment described above, they will need new skills, organizational structures, and management systems. The Minnesota Medical Association and the Hennepin and Ramsey county medical societies are working together to consider how best to serve their members' needs by developing an array of services that help independent physician practices function effectively in this increasingly competitive and regulatory environment. Specifically,

such services might include the following:

1. Sponsoring seminars for member physicians and medical group administrators on such topics as current trends in the health care system, practice management, third-party contracting, negotiating skills, alternative models for linking medical practices, and hospital/physician joint ventures. The dissemination of information through seminars could be supplemented by articles in *Minnesota Medicine* and the Hennepin and Ramsey county medical society bulletins.

2. Developing organizational templates for use by medical practices contemplating mergers or other forms of affiliation with other medical practices. These models would guide physicians faced with assembling sufficient resources to build and maintain enhanced management systems and manage working and contractual arrangements with hospitals, health plans, and others. Organizational templates might address such issues as an appropriate legal structure, overhead sharing/income distribution, personnel and facilities, shared clinical resources, shared coverage, business office systems, retirement plans, promotion, and marketing. Consultant Douglas Shaw, co-author of this paper, has been retained by the Minnesota Medical Association and the Hennepin and Ramsey county medical societies to develop a prototype model of a "clinic without walls" that will be reviewed through the Minnesota attorney general's office for an advisory opinion regarding antitrust issues. If the medical societies receive the go-ahead, they plan to develop a full-scale model.

3. Developing additional model practice management systems that can guide physicians in the efficient and effective governance and management of their practices. In addition to a checklist, this might include model bylaws and employment agreements, sample personnel policies and procedures, staffing guidelines, information systems, business office policies and procedures, and medical records systems. Consideration might also be given to operating or spon-

soring a practice management consultation service for member physicians.

4. Adapting the Medical Staff-Hospital joint venture model, developed during the 1980s, for use by physician practice umbrella organizations interested in structuring working relationships with hospitals.

"Independent physician practices will need new skills, organizational structures, and management systems."

5. Cooperating with other health care organizations to obtain technical assistance in defining and developing or acquiring an information system to measure the utilization and cost of health care services and patient outcomes. Any data system developed must be capable of combining data from both physician office and hospital settings and, ultimately, must be responsive to health care purchasers' needs.

The observations in this paper about the health care system and the suggested activities outlined above are not intended in any way to imply that large group practices, health plans, or hospital systems should be restricted or discouraged from expanding their scope of services and share of the market. These larger organizations tend to have very effective management and marketing expertise at their disposal, and we anticipate their expansion. The concepts presented in this paper are simply intended to help physicians in smaller practices decide for themselves how they wish to organize in the future and with whom they desire to affiliate as more and more mergers, acquisitions, and affiliations occur.

Finally, we recommend that phy-

sicians obtain independent legal, tax, and business advice before implementing any alternative forms of medical practice organization. **MM**

Douglas Shaw previously served as chief executive officer of the Minnesota Medical Association and currently is a principal in Summit Partners, a Twin Cities-based health care consulting firm.

Thomas Hoban is chief executive of the Hennepin County Medical Society.

REFERENCES

1. Alternative forms of organizations for medical practices. Minneapolis: Hennepin County Medical Society, 1985 Aug.
2. Trends in Twin Cities hospital utilization 1984-1990. St. Paul, MN: Council of Hospital Corporations, 1991 Nov.
3. Nissen T. The case for consolidation. Minneapolis/St. Paul CityBusiness special section: employers health care guide 1992 April 3:4A.
4. Porter MJ, Ball PA, Kraus N. The InterStudy competitive edge: biannual report of the managed health care industry. Excelsior, MN: InterStudy, 1992:15.
5. Statistical report on health maintenance organization operations in Minnesota. Minneapolis: Minnesota Department of Health—HMO Unit, 1990.
6. 1991 HMO operations in Minnesota. Minneapolis: Minnesota Department of Health—Health Care Delivery Systems, 1992 Apr: 4.
7. Blue Cross and Blue Shield of Minnesota. 1991 annual report: bringing out the best. Minneapolis: Blue Cross and Blue Shield of Minnesota, 1991:13-14.
8. Hoy EW, Curtis RE, Rice T. Change and growth in managed care. *Health Aff (Millwood)* 1991;10(4):19.
9. McDonnell L. Taking their own medicine. St. Paul Pioneer Press 1992 March 29;Sect. A:1-2.
10. Quality and quantity: Medica is proving it's possible to have both. Medica indicators: managed care information for Medica customers 1992;2(2):2.
11. Physician payment reform [Brochure]. Hartford, CT: The Travelers Companies, 1991.
12. Barnes CE: Physician organizations begin making inroads in the health care marketplace. *Internist* 1988 Oct:6-9.

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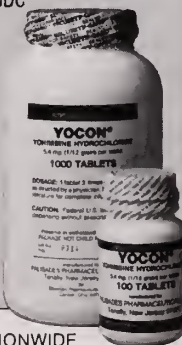
Dosage and Administration: Experimental dosage reported in treatment of erectile impotence.^{1,3,4} 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to 1/2 tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.³

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References:

1. A. Morales et al., New England Journal of Medicine: 1221. November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

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Cardiopulmonary Resuscitation in Nursing Homes

Continuing Concerns

Timothy J. Crimmins, M.D.

The position paper on cardiopulmonary resuscitation by the Minnesota Association of Nursing Home Medical Directors in this issue of *Minnesota Medicine* (page 35) is a timely and important contribution to the development of a rational policy regarding the use of CPR in nursing homes. The paper arose out of concern that regulatory agencies were inappropriately disciplining nursing personnel for failing to provide CPR to nursing home residents in cardiac arrest when the facilities' guidelines mandated its use. It became clear that policies governing the use of CPR in nursing homes needed to be redrafted to acknowledge recently published studies demonstrating that CPR may be of no benefit in certain clinical circumstances. There is a growing recognition that the universal application of CPR for all nursing home residents suffering a cardiac arrest may no longer be appropriate. This coincides with anticipated revisions to the American Heart Association's guidelines for advanced cardiac life support and emergency cardiac care, which state that cardiopulmonary resuscitation, like all medical therapies, has indications and contraindications to its use.

The paper by the Minnesota Association of Nursing Home Medical Directors establishes useful conceptual guidelines regarding the role of the nursing home medical director, the importance of developing institutional policies regarding the use of CPR, and the critical role of physicians in directing advanced care planning with their patients. Further guidelines need to be developed for determining when CPR will be of no benefit. Such guidelines would allow nursing personnel to determine that a resident has died in the nursing home without first performing a trial

of cardiopulmonary resuscitation.

The paper outlines responsibilities of physician medical directors of nursing facilities, who must be involved in developing criteria for the determination of death by nursing personnel in the facilities, as well as

“Nursing personnel
need clear criteria for
determining death in
individuals who have
an unwitnessed
cardiac arrest.”

reviewing deaths in nursing homes to ensure that appropriate medical care is provided to the dying patient. Nursing home medical directors may be required to interpret nursing facility policies as they apply to individual residents, and they should be integral members of their facilities' institutional ethics committees. Nursing home medical directors should be familiar with the federal Patient Self-Determination Act, the Minnesota Nursing Home Residents' Bill of Rights, and the Minnesota living will law. Federal law holds physician medical directors responsible for the medical care provided in nursing homes; therefore, they must be involved in developing institutional policies regarding the provision of CPR to nursing home residents. These policies should be based on valid scientific studies regarding the probability of successful resuscitation following CPR in various populations.

These policies should specifically

state that cardiopulmonary resuscitation should not be provided by nursing staff or other personnel in the presence of a written physician order to withhold CPR. They should ensure that informed consent is obtained for the “No CPR” (Do-Not-Resuscitate) order from competent patients or the surrogate of patients lacking decision-making capacity; or in the event that CPR can be predicted to be of no benefit, fully informed disclosure should be provided to patients. Documentation of the discussion and decision must be a practice standard. The definition of no benefit should be based on valid scientific studies. Blanket policies mandating the provision or withholding of CPR to all residents should be discouraged. Once the CPR order is written, provisions should be made to communicate the order to the nursing home personnel and emergency providers. “No CPR” (DNR) orders and the policies governing their use should be reviewed periodically.

Physicians' failure to hold timely discussions with residents regarding CPR is one reason for confusion regarding the use of CPR in nursing homes. Physicians should clearly document these discussions in the medical notes. They should explain to nursing facility residents the probability of successful resuscitation after CPR and reassure patients that they will continue to get medical and nursing care appropriate to their needs should the patient request a “No CPR” order. A DNR or “No CPR” order should not make a resident fear substandard care, neglect, or abandonment. If it can be shown that the patient will not benefit from CPR, the physician should provide fully informed disclosure before writing a “No CPR” order.

The difficulty in providing this information is determining when CPR would be of no benefit. Recently published studies indicate that the success of cardiopulmonary resuscitation is highly dependent on the individual's pre-arrest condition. A successful outcome is more likely to occur in individuals without serious underlying medical conditions who suffer ventricular fibrillation or ventricular tachycardia that was "witnessed" as the cause of their cardiac arrest. The poorest outcomes occur among persons with underlying conditions such as sepsis, metastatic cancer, end-stage neurologic disease, and multi-organ failure. A determination that CPR will be of no benefit should be made on the basis of published, valid scientific evidence that demonstrates no survival after providing CPR to patients with similar medical conditions.

In some instances, nursing home residents who do not have "No CPR" orders are found to be in cardiac arrest. Sometimes these patients, who may have been dead for long periods of time, do not exhibit lividity and rigor—the usual criteria for determination of death. Nursing personnel need clear criteria for determining death in individuals who have an unwitnessed cardiac arrest. The traditional practice of providing an "adequate trial of advanced cardiac life support" may not be appropriate in certain clinical conditions. In certain situations, nursing personnel should be allowed to make a determination of death without a CPR trial. Criteria should include the requirement that no signs of life be present: no pulse, no respiration, no pupillary response, no neurologic activity; and that the patient was not seen to collapse or have a sudden cardiac arrest or other immediately reversible cause of cardiac arrest, such as choking or airway obstruction.

A policy allowing nurses to make the determination of death in the nursing home after an unwitnessed cardiac arrest is in no way intended to encourage nursing personnel to abandon dying patients or to avoid witnessing their cardiac arrest. Nursing personnel must be trained to recognize patients in distress and seek

help in their management. They must continue to be trained to recognize and treat choking and airway problems and to initiate and perform CPR when appropriate. A nursing home policy that allows nurses to determine death at the bedside without initiating CPR in no way releases physicians from their obligation to carry out advanced treatment planning, including a discussion of CPR with nursing home residents or their surrogates.

The position paper drafted by the Minnesota Association of Nursing Home Medical Directors is important in establishing the nursing home medical director's role in formulating policies regarding CPR and the determination of death in nursing facilities. MM

Timothy Crimmins is an emergency physician at Hennepin County Medical Center and is chair of the Minnesota Medical Association's Committee on Ethics and Medical-Legal Affairs.

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Cardiopulmonary Resuscitation in Minnesota Nursing Homes

A position paper by the Minnesota Association of Nursing Home Medical Directors

Editor's Note: *The Minnesota Association of Nursing Home Medical Directors submitted this position paper to the Minnesota Department of Health in December 1991 in response to a Health Department letter published in the July 1991 issue of Minnesota Medicine inviting comment on issues related to administering cardiopulmonary resuscitation in nursing homes ("The Health Department's Role in Formulating CPR Policy," Minnesota Medicine, July 1991, page 33). The Minnesota Association of Nursing Home Medical Directors hopes to continue that dialogue by publication of this paper and encourages ongoing physician involvement in formulating CPR policy.*

The Minnesota Association of Nursing Home Medical Directors supports the development and implementation of nursing home policies and procedures that promote the proper use of cardiopulmonary resuscitation (CPR). To be most effective, such policies must be based on current medical knowledge about the risks and benefits of CPR and must guide professional staff to respect each resident's preferences, values, and clinical circumstances.

Background

Only recently have clinical studies provided information on which to base nursing home CPR policies. Unfortunately, these studies must be interpreted cautiously because of inconsistencies in study design. For instance, definitions of resuscitation outcomes considered "successful" range from restoration of vital signs after resuscitation to discharge from the hospital. Additionally, variations in patient characteristics among the studies, such as baseline functional

status, level of cognition, and other co-morbidities make it difficult to make consistent comparisons.

Clear evidence from the data, however, reveals that CPR outcome is highly dependent on the patient's premorbid condition. The poorest

"Policies must assure that residents are aware of the risks of CPR and the very low probability of any benefits."

outcomes occur among persons with such underlying chronic conditions as sepsis, cancer, neurologic disease, and failure of one or multiple organ systems.^{1,2} Other factors also influence the likelihood of a favorable outcome; these include whether an arrest was witnessed, what the cardiac rhythm was when resuscitation was initiated, and how long the resuscitation was performed.³⁻⁹

Importantly, studies that specifically address resuscitation of nursing home residents are rare; we identified only two studies and both report exceedingly poor outcomes.³ One study reported two survivors among 244 subjects who sustained out-of-hospital arrests; it is unclear whether the survivors were nursing home residents. Furthermore, the two resuscitated "arrests" were unusual in that one survivor had a pure respiratory arrest with no circulatory compromise, and the other survivor suffered a witnessed arrest while in a hospital

emergency department. The second study found that only two of 117 nursing home residents resuscitated in nursing homes survived to hospital discharge.¹⁰ One survivor was an 87-year-old woman who lived for eight months with a large sacral pressure sore, cachexia, and dementia (she reportedly was unable to recognize family members); the other survivor was an 87-year-old man who died within two weeks of his return to the nursing home following a two-month hospitalization. From the little knowledge available, it appears that successful CPR in any setting—including nursing homes—is most likely to occur among persons who: 1) have ventricular tachycardia or ventricular fibrillation associated with their arrests;^{3,8,11,12} 2) respond rapidly to resuscitation (within 5 to 15 minutes);^{1,3,11} 3) sustain a witnessed arrest;^{3,6,7} and 4) are free of serious underlying conditions such as sepsis, neoplasm, neurologic disease, or failure of one or more organs.^{1-3,11}

Considering the factors critical for successful CPR, one can understand why CPR is rarely successful when performed in nursing homes. Unfortunately, with the low likelihood of success also comes a high probability of CPR-induced morbidity with attendant pain and suffering, as well as unnecessary health care costs. Realistic policies regarding CPR in nursing homes must assure that residents are aware of the true risks of CPR and the very low probability of any benefits.

These sobering realities reveal the importance of working with nursing home residents to establish a plan for administering or withholding CPR. Currently, there are two recognized rationales for withholding CPR. One, which is well established, relies on

the individual or family/proxy to decide on a plan to administer or withhold CPR based on the resident's own wishes or wishes communicated through a proxy or an instrument such as the living will.² A second and newer concept, based on actual experiences demonstrating CPR's futility as a medical treatment in certain circumstances, is gaining wider recognition.^{2,13,14} This concept holds that when CPR is highly unlikely to result in a successful outcome, it can be considered futile therapy. According to this still-evolving concept, physicians do not have an ethical duty to perform CPR when it has little or no probability of benefit. In fact, considering the substantial morbidity associated with unsuccessful CPR among typical nursing home residents, physicians may have an obligation to withhold CPR in certain circumstances.

We want to emphasize that nursing home residence alone does not preclude successful CPR;¹⁵ the decision to perform or withhold CPR must be based on individual patient characteristics.

Role of Nursing Home Medical Directors

Medical directors can help sort out the difficult issues associated with decisions about CPR for nursing home staff, primary care physicians, and residents and their families/proxies. In particular, medical directors can help to:

- clearly define such terms as "No CPR," "limited treatment plan," and other such designations, including their limitations;
- advance medical knowledge regarding the probability of successful resuscitation in various populations;
- identify the spectrum of events associated with resuscitation, including the likelihood of invasive procedures in subsequent hospital intensive care unit settings if CPR is initially successful;
- clarify the concept of futility as a basis for withholding CPR;
- apply the knowledge regarding CPR risks and benefits to individual cases;

- establish appropriate criteria for on-site determination of futility of CPR; and

- monitor clinical approaches to assure the consonance of policy with practice.

Some facilities may use a multidisciplinary committee, usually an ethics committee, to develop their approaches to these difficult issues. When a facility takes this course, it is important that the medical director serve as an integral member of the team.

Medical directors should also ensure that all residents receive appropriate care, regardless of any ambiguity regarding official resuscitation status.

Components of Effective CPR Policies

The Minnesota Association of Nursing Home Medical Directors recommends that nursing homes develop facility policies on CPR that incorporate provisions related to 1) planning for CPR, 2) identifying individuals who should not receive CPR, and 3) providing CPR.

Planning for CPR

Individual resident plans regarding CPR are most effectively developed in the nursing home when nurses, primary care physicians, social workers, and other professionals such as clergy, work with residents and their families and/or proxies. This process should be initiated as early as possible before or during the resident's stay in the facility. Medical directors should be freely available for consultation regarding individual treatment plans as well as for developing and interpreting institutional policies. Whenever possible, the resident's beliefs and values should provide the basis for informed decision making. The process should:

- incorporate any materials containing information on previous advance directives, such as those provided under the Minnesota Adult Decisions Health Care Act (i.e., living wills), the Minnesota Nursing Home Residents' Bill of Rights, and the federal Patient Self-Determination Act;

- provide counseling or educational support to enable a resident to make informed decisions about CPR. In particular, a resident should understand the risks and benefits before making decisions about CPR;

- use the services of proxy decision makers appropriately when a resident does not have the capacity to make these decisions;

- ensure proper procedures that inform the resident or proxy when futility is the basis for a "No CPR" order;¹²

- require that "No CPR" orders be given by a physician, with some provision for acceptance of verbal orders pending the receipt of written orders;

- ensure accurate communication of resuscitation status to emergency transportation and acute care providers; and

- ensure that resuscitation status is updated periodically and when the resident's condition changes.

Blanket policies and standing orders regarding provision of CPR to all residents of a given facility, whether mandating or proscribing such therapy, are to be discouraged. In the usual nursing home setting, such approaches ignore the highly heterogeneous nature of nursing home residents and the principle of individualized treatment planning.

Identifying individuals who should not receive CPR

In most instances, a "No CPR" order precedes the death of nursing home residents in Minnesota. However, as many as 10 percent to 30 percent of Minnesota nursing home residents die without such an advance directive.¹⁶ Clearly, CPR would have been ineffective for most of these individuals without "No CPR" directives.

In most situations, a physician's order must be present to permit nursing home staff to withhold CPR, but there are circumstances in which CPR is not appropriate even when a "No CPR" order is lacking. One such circumstance is the unwitnessed arrest; it is generally recognized that CPR is of no benefit in this situation.^{3,6,7}

Other rare situations may also occur where CPR should be withheld

even when physician orders do not specify "No CPR" status. Nursing home policies on CPR can provide a structured approach to withholding CPR when that would be in the resident's best interests and when the physician is not immediately available on-site to give the "No CPR" order. Such policies must be drafted with extreme care and with specific clinical criteria, and the medical director must regularly evaluate the facility's actual experience and outcomes under the policy.

Some examples of critical instances when nursing homes might choose to utilize this provision could include, but would not be limited to, the following:

- the discovery of new substantive information concerning a resident's wishes that would negate previous CPR status; and
- a clear change of mind on the part of the resident or the family/proxy when it is impossible to contact the physician soon enough to provide a "No CPR" order.

A facility, in consultation with its medical director, can develop a resuscitation policy that identifies professional staff capable of synthesizing such unanticipated information. Such policies must provide internal and meaningful oversight of implementation to protect residents from unwanted application. In all cases, the physician must still be notified of events as soon as is practically possible.

In summary, nursing home policies can empower staff to withhold CPR for such reasons as:

- the existence of a "No CPR" order;
- an unwitnessed arrest; and
- other rare clinical situations, such as a clear change in the resident's wishes.

When properly written, nursing home policies on CPR will encourage all staff to respond skillfully and professionally when they encounter a resident in cardiac arrest. Furthermore, these policies can be designed to encourage staff to provide timely and compassionate care to a dying resident regardless of his or her resuscitation status, rather than cause staff to avoid caring for dying resi-

dents for fear the resident will "code" in their presence.

Providing CPR

When CPR is considered appropriate, it should be delivered in a professionally competent manner. Procedures to ensure this include, but are not limited to, the following:

- proper training of staff in techniques for performing CPR and summoning aid from within and outside the nursing home;
- correct recognition and implementation of procedures to open an obstructed airway;
- prompt initiation of CPR when indicated either because it is appropriate for the resident or its appropriateness is being determined; and
- correct performance of CPR.

Conclusion

New knowledge about CPR, particularly about its lack of efficacy in nursing home populations, mandates new approaches to resuscitation for nursing homes residents. The nursing home medical director is key to helping nursing homes apply current knowledge correctly and incorporate future advances into practice.

The goal of CPR policies must be to serve residents appropriately while promoting professional responsibility among staff. As a better understanding of CPR effectiveness and futility is achieved, balancing the principle of "first, do no harm" with patient autonomy will become more natural. Policies developed to meet today's needs will undoubtedly need ongoing revision.

MM

REFERENCES

1. Bedell SE, Delbanco TL, Cook EF, et al. Survival after cardiopulmonary resuscitation in the hospital. *N Engl J Med* 1983;309:569-76.
2. Council on Ethical and Judicial Affairs, American Medical Association. Guidelines for the appropriate use of do-not-resuscitate orders. *JAMA* 1991;265:1868-71.
3. Murphy DJ, Murray AM, Robinson BE, et al. Outcomes of cardiopulmonary arrest in the elderly. *Ann Intern Med* 1989; 111:199-205.
4. Eisenberg MS, Hallstrom A, Bergner L. Long-term survival after out-of-hospital arrest. *N Engl J Med* 1982;306:1340-3.
5. Longstreth WT, Cobb LA, Fahrenbruch

CE, et al. Does age affect outcomes of out-of-hospital cardiopulmonary resuscitation? *JAMA* 1990;264:2109-10.

6. Sweeney TA, Dorn MR. Resuscitation of cardiac arrest victims by advanced life support units in Monroe County, New York. *NY State J Med* 1989;89:652-4.

7. Bachman JW, McDonald GS, O'Brien PC. A study of out-of-hospital cardiac arrests in northeastern Minnesota. *JAMA* 1986; 256:477-83.

8. Tresch DD, Thakur R, Hoffman RG, et al. Should the elderly be resuscitated following out-of-hospital arrest? *Am J Med* 1989;86:145-50.

9. Tresch DD, Thakur R, Hoffman RG, et al. Comparison of outcome of resuscitation of out-of-hospital arrest in persons younger and older than 70 years of age. *Am J Cardiol* 1988;61:1120-2.

10. Applebaum GE, King JE, Finucane TE. The outcome of CPR initiated in nursing homes. *J Am Geriatr Soc* 1990;38:197-200.

11. Bayer AJ, Ang BC, Pathy MS. Cardiac arrests in a geriatric unit. *Age Ageing* 1985;14:271-6.

12. Gulati RS, Bhan GL, Horan M. Cardiopulmonary resuscitation of old people. *Lancet* 1983;i:267-9.

13. Schneiderman LJ, Jecker NS, Jonsen AR. Medical futility: its meaning and ethical implications. *Ann Intern Med* 1990; 112:949-54.

14. Tomlinson T, Brody H. Futility and the ethics of resuscitation. *JAMA* 1990; 264:1276-80.

15. Miles SH. Resuscitating the nursing home resident: futility and pseudofutility. *J Am Geriatr Soc* 1990;38:1037-8.

16. Miles SH, Driscoll J, McCusker M. CPR in nursing homes: policy and clinical realities. *Minn Med* 1991;74(7):31-5.

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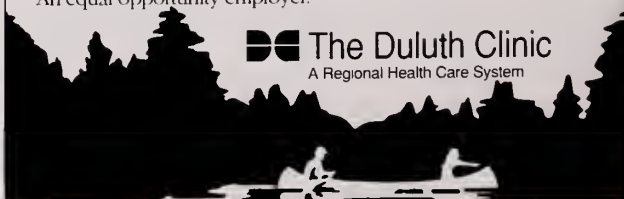
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Minnesota Access to Health Records

Practical Steps to Complying with a Confusing Law

Mary E. Prentnieks, J.D.

The broadly written 1991 amendment to the Minnesota access to health records law raised many questions about the appropriate handling of requests for the release of patient information. The 1992 amendment, intended to clear the confusion, unfortunately raised more questions.

The first amendment specifies that a provider may not release a patient's health records without a signed and dated consent from the patient or the patient's legally authorized representative, unless release is required for an emergency or is otherwise authorized by law. A consent is valid for one year unless a shorter period is specified in the consent or a different period is provided by law. A person who negligently or intentionally releases a health record in violation of the law may be liable to the patient for compensatory damages, plus costs and reasonable attorney's fees.

On its face, the 1991 amendment seemed to be a simple attempt to protect patient confidentiality. However, the language of the law is so broad that it left physicians and clinics wondering how to handle release of patient information, which previously had been a routine part of providing medical services. Many questions were left unanswered: Could records be released to other treating physicians without a signed consent from the patient? Could quality assurance or utilization review surveyors from third-party payers be allowed access to records without a recently signed patient consent? Were annual consents from patients necessary for the release of records to their insurance companies for payment purposes? Was patient consent necessary for the release of records for research purposes?

In light of these uncertainties,

many clinics developed a general authorization for the release of health records to other treating physicians and payers that patients could sign as part of their registration, and these clinics implemented a system for ensuring that signatures were updated annually. All other release requests

"Minnesota law governing the release of health records is becoming increasingly complex."

were handled as before the new law, except that any specific release requests were required to have a patient's signature within the last year.

In an effort to clarify the process for releasing records to payers, consulting physicians, and scientific research entities, the 1992 Legislature amended the statute again. Unfortunately, the new legislation does not resolve the ambiguities and only adds to the confusion.

According to health law attorney James Platt, with the Fredrikson & Byron law firm, "Although the Legislature had good intentions to simplify the statute, the language used gives rise to many questions and uncertainties." Health law attorney Nancy Kiskis, with the law firm of Moss & Barnett, agrees that the law is now more problematic than ever. In a recent meeting with this paper's author, Platt and Kiskis offered some practical ways to deal with the most recent changes in the law.

Release of Information to Consulting Providers

According to Platt and Kiskis, providers should continue to obtain patient consent annually for the release of health records to a consulting provider.

Instead of requiring an annual patient consent, the 1992 amendment allows a provider to release health records after a one-time "informed consent" to another provider who is being advised or consulted in connection with the patient's current treatment. However, it is unclear what type of "one-time" consent would qualify as "informed consent" that would be valid indefinitely. Platt and Kiskis suggest providers continue to obtain annual patient consents until the Legislature clarifies this language.

Release of Information to Third-Party Payers

"The 1992 amendment attempts to allow providers to release health records without an annual consent to third-party payers after a one-time consent but appears to impose an unrealistic responsibility on providers to ensure that recipients of health records will handle them appropriately," says Platt. In particular, the law requires that a provider ensure that 1) the use or release of the records complies with the Minnesota Insurance Fair Information Reporting Act; 2) the recipient does not release the records in individually identifiable form to a person other than the patient without the patient's consent; and 3) the recipient establishes adequate safeguards to protect the records from unauthorized disclosure, including a procedure for removal or destruction of information

that identifies the patient.

"Because providers do not have control over the manner in which third-party payers will handle health records, providers may want to take the conservative approach and continue to obtain a written annual consent from patients for the purpose of releasing records to third-party payers," says Platt. This at least complies with the general rule for release of health records. Platt also suggests that providers attach a cover letter to records released to third-party payers that essentially conveys the following:

"Further release of these health records in individually identifiable form to a person other than the patient without the patient's consent is prohibited by Minnesota law. Minnesota law also requires adequate safeguards to protect the records from unauthorized disclosure, including a procedure for removal or destruction of information that identifies the patient. We presume that these measures are being carried out by your organization. If not, please inform us immediately."

Release of Records for Research Purposes

The 1992 amendment also exempts the patient consent requirement for the release of health records to qualified personnel solely for the purposes of medical or scientific research, if the patient has not objected to a release for research purposes and the provider makes a reasonable effort to determine certain safeguards.

This provision is slightly less onerous than the one above; it requires a provider to make a reasonable effort to determine that the recipient has certain safeguards in place rather than requiring the provider to ensure that a recipient will behave in a certain manner. To fulfill the obligations under this provision, before releasing the records, the provider should ask the researcher for what purposes the information will be used and reasonably attempt to determine whether the use or disclosure will violate any limitations imposed by the law, advises Kiskis.

The law is silent on whether the

physician is obligated to ask the patient whether he or she objects to the release of health records for research purposes; however, the law was apparently intended to allow easier access to information for research purposes, and it appears that it may not be necessary to ask the patient

**"The new legislation
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adds to the
confusion."**

whether he or she objects. Responding to an objection raised by the patient may be sufficient, although the law does not make this clear.

Kiskis says the provider should also make a reasonable effort to determine whether the use or disclosure in a form that identifies the individual is necessary to accomplish the research objectives. Finally, says Kiskis, the provider should ask the researcher what mechanisms have been established and will be maintained to protect the records from unauthorized disclosure and should specifically ask about procedures for removing or destroying information that identifies the patient. Kiskis advises that all correspondence with the researcher be kept on file and all conversations with the researcher be documented and filed. "Both of these procedures will help to protect the provider in the event that a lawsuit is brought by a patient," she says. Providers may want to send a cover letter—similar to the one above—to ensure that the recipient understands the provider's expectations for handling the record.

The research provision is effective until June 1, 1994. Before that time, the Legislature may conduct hearings regarding the release of health records for research purposes and the need for patient consent.

Release of Immunization Records

The 1992 changes in the access to health records law also eliminate the requirement that providers obtain patient consent for the release of immunization information in many circumstances. Patient consent is no longer required for physicians to exchange data on the date and type of immunizations with other health care providers, elementary and secondary schools, child care facilities, public or private post-secondary educational institutions, boards of health, community action agencies, and the commissioner of health, if those requesting the information provide services on behalf of the patient.

In addition to imposing requirements affecting patient consent and ensuring patient privacy with regard to the release of health records, the 1992 amendment also adds a provision limiting what a provider may charge for copying and releasing health records. While failing to define "current medical care," the new law prohibits a provider from charging patients a fee for copies of their records for purposes of reviewing current medical care. Providers may still charge a fee for records requested for review of non-current medical care, but the law imposes a maximum limit of 75 cents per page plus a \$10 administrative retrieval fee, unless a lower maximum amount is provided by law or in a contract. The limitation does not apply to x-rays. The provider may charge a patient no more than the actual cost of reproducing x-rays, plus no more than \$10 for the time spent retrieving and copying the x-rays.

As in the past, providers must collect a sales tax for copying and retrieval charges. Questions about the sales tax should be referred to the Department of Revenue at 612/296-6181 or 800/657-3777.

Both Kiskis and Platt agree that the new law has created more questions than answers. Their conservative recommendations may prevent misapplication of a very complex law as well as protect patient privacy.

Minnesota law governing the release of health records continues to

change in a piecemeal fashion and is becoming increasingly complex. At the MMA's request, the Minnesota State Bar Association's Health Law Section Governing Council has agreed to form a subcommittee to redraft portions of the law in an effort to clarify the legislative intent. For the time being, clinics should make every effort to comply with the law by taking a conservative approach. The MMA will keep physicians and clinics informed of any future developments. MM

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Mary Prentnieks is the Minnesota Medical Association's general legal counsel. This article discusses general legal principles; it is not legal advice. For legal advice, consult qualified legal counsel.

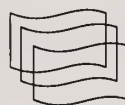
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Valuing the Primary Care Patient Base

Daniel K. Zismer, Ph.D., and Davis D. Fansler

A Twin Cities-based buyers' coalition representing 14 employers recently issued a request for proposal (RFP) calling for a "fundamental shift" in the way health care is delivered to and purchased by organized self-insured buyers. Among the five primary requirements the coalition asked responding health care organizations to meet is an ability to manage the totality of care, with a particular emphasis on primary care and the coordination of services between the inpatient and outpatient setting. While subspecialty medicine, with its advanced technologies and higher income potential, continues to lure physicians and hospital executives in search of market advantages,¹ the value of the primary care medical practice is gaining notice for its importance in the integrated health service delivery model now in demand. The employer coalition's RFP is a harbinger of an emerging health care delivery paradigm that recognizes the primary care physician's value.

The following is an analysis of the financial value of a primary care physician's patient base. Of course, the value of a well-conceived primary care strategy extends beyond dollars and cents for larger multispecialty groups and hospitals pursuing greater integration, including physician-hospital organizations. A well-organized primary care system provides:

- an ability to penetrate valuable strategic markets by bringing services directly to the user;
- a foundation for any organized managed care strategy, including one that would meet the demands of self-insured employers or employer coalitions;
- a platform for establishing effective continuous quality improvement;

- a focal point for tracking and managing costs and clinical efficiency; and

- a predictable source of patient referrals to subspecialty programs.

The following primary care

**"The value of the
primary care medical
practice is gaining
notice."**

analysis is confined to family practice and general internal medicine, although primary care traditionally includes pediatrics and ob/gyn as well. Assumptions presented in this paper are based on actual medical practice experience and data and are corroborated by a review of the available literature. The analysis is intended to aid those involved in strategic planning for physicians, clinics, hospitals, and physician-hospital organizations.

Inpatient-Outpatient Hospital Potential

On average, most primary care physicians serve about 2,500 patients, although the size and demographics of case loads vary by type of specialty (e.g., family medicine or internal medicine), age of the practice, and region of the country.

To assess the value of a primary care physician's patient base, we first evaluate its inpatient potential. A study of hospital use rates in Hennepin County, Minnesota, showed a range of 264 to 300² admissions per 2,500 people. While inpatient ad-

missions will vary according to region of the country, area demographics, and local practice styles, at an average rate of \$4,500,^{3*} the total annual inpatient revenue potential ranges from \$1,188,000 to more than \$1,350,000.

Since the average primary care physician admits from 110 to 190 patients to the hospital annually in the United States,⁴ admissions by subspecialists account for the balance. The proportion of patients who are admitted to a hospital by a subspecialist after a direct referral from a primary care physician is unknown; however, it is presumed to be significant.

Table 1 shows the inpatient potential generated by the average primary care physician case load (i.e., 2,500 patients) expressed in patient days using hospitalization rates by major diagnostic groupings in Hennepin County (population about 1.2 million) for the year ending September 30, 1990.

After assessing inpatient potential, we look at the revenue opportunities available through ambulatory services, including outpatient interventional procedures. According to a survey of 524 executives throughout the United States,⁵ hospitals expect to increase their percentage of net revenues from ambulatory services substantially in the 1990s. Anecdotal evidence shows that some hospitals are approaching a 50:50 rate. According to available surveys³ and client-generated information, the average primary care physician's patient base yields from \$175,000 to \$220,000 in annual hospital ambulatory revenues. About 19 percent of

*Financial projections have been adjusted for inflation.

Table 1

*Inpatient admission volume per primary care physician's patient case load**

Diagnostic grouping	Inpatient days
Oncology	64
Cardiology (including card., cath., and surgery)	216
Psychiatry	209
Substance abuse	59
Eye	4
ENT	34
Neurosciences	89
Orthopedics	140
Urology	57
Gynecology	50
Obstetrics	87
Newborns	81
Neonates	119
General medicine	381
General surgery	150
TOTAL	1,740

*Expressed in inpatient days; includes direct admissions (those accounted for by primary care physician admissions) and indirect admissions (those generated by all other sources).

primary care office visits are expected to result in an outpatient hospital admission, at an average charge of \$175 to \$250.

Referral Physician Utilization

Although not all patients seek subspecialty medical and surgical services through a referral from their

primary care physicians, most do, particularly in managed care markets. An estimate of primary care physician referrals to medical subspecialists and surgeons is useful to physicians and hospitals evaluating their medical staff needs. Table 2 presents selected subspecialty medical and surgical physician staffing ratios required to serve the hypothetical primary care case load presented here. We developed these ratios using norms made available by several sources⁶⁻⁷ and our experiences with clients over the past six years.

Also included in Table 2 is an estimate of the professional and office-based ancillary fees generated by the patient base for the selected specialists. Production estimates will vary somewhat from region to region and in different practice settings.

Primary Care Professional and Technical Production

Finally, the primary care physician's personal production, both professional and technical charges, needs to be considered in the overall analysis. According to the Medical Group Management Association, a family physician practicing in the Midwest generates from \$300,000 to \$325,000 of billed charges. A general internist generates from \$330,000 to \$355,000.

Total Value

Based upon the analysis presented here, the total health care service revenue potential generated by the average primary care physician case load approximates \$2.5 million.[†] Table 3 summarizes revenue potential by provider and service category.

Summary

This analysis, albeit limited, can help clinics and integrated health systems with their medical staff planning,

[†]The extent to which this "total value" varies will depend upon a variety of contributing factors such as geographic region, age, and specialty of primary care physicians serving the sample population, and factors such as the overall health care service availability and demographics of the patient sample studied.

Table 2

Subspecialty medical and surgical physician requirements and fees for the average primary care physician's active patient care load

Specialty	FTE	Fees generated
Cardiology	.08	\$41,797
Oncology	.13	68,521
Orthopedics	.16	118,292
Gen. surgery	.21	94,106
Eye	.10	72,464
ENT	.10	56,240
Neurology	.05	23,815
Neurosurgery	.02	15,034
Urology	.07	38,388
Ob/Gyn	.22	130,160
Gastroent.	.08	44,501
TOTAL	1.24	703,318

and it demonstrates the importance of the primary care patient base as a foundation for health services planning and economic and market strategies.

It is important to note, however, that when primary, specialty, subspecialty, surgical, and hospital care are well planned and marketed, it is virtually impossible to identify the relative contribution of each to the overall success of the system. Consequently, primary care physicians should not attribute the value discussed here solely to their efforts. Hospital executives should be mindful of two related issues: First, some administrators remain focused on inpatient services when outpatient services may offer greater economic potential over time. Ambulatory interventional diagnostics and thera-

Table 3

Total annual health service revenue potential of the average primary care patient base

Revenue category	Amount
Primary care physician production (professional and technical)	\$330,000
Hospital inpatient (280 admissions)	× \$4,500/admission = \$1,260,000
Hospital ambulatory (including surgical, 947 encounters)	× \$212/admission = \$200,764
Subspecialty medical and surgical (technical and professional fees)	\$703,318
TOTAL	\$2,494,082

peutic procedures (e.g., outpatient surgery) are often undervalued or overlooked in medical staff development plans. The net profits available from additional ambulatory surgical cases can be significant. Second, success in developing a medical staff plan requires more than calculating physician supply and demand ratios. A balance must be struck between meeting the hospital's needs for additional physicians and meeting the needs of the existing medical staff. A number of hospital executives have found that devoting all physician-related resources to recruiting new staff can create resentment among physicians who have remained loyal to their hospitals without financial and other practice incentives and inducements.

We encourage multispecialty group practices to become students of primary care development as well and urge them to guard against focusing on the high overhead costs of primary care without recognizing the value of an organized primary care strategy. As group practices are assessed for their future value in an integrated health care delivery system, the primary care component will weigh heavily in the valuation process, especially in competitive managed care markets.

While there is undoubtedly value in acquiring subspecialty technologies and professional support, doing so without a well-grounded primary care foundation leaves integrated health service systems financially and

strategically vulnerable. Conversely, adopting a primary care focus as the basis of any organizational plan will assure that:

- geographic opportunities are exploited;
- managed care buyer demands for access, cost, and quality management are met;
- specialty referral volume requirements are satisfied; and
- continuous quality improvement programs and objectives are well grounded.

All indications suggest the pendulum is swinging back; the importance of primary care is re-emerging. For example, the shortage of primary care physicians is being recognized at national levels by the Kellogg Foundation, the Robert Wood Johnson Foundation, and others. The most promising trend, however, may be the growth of vertically integrated health care systems in which hospitals and physicians join forces to meet emerging market and economic demands. The primary care physician will be recognized and valued as the focal point of these systems as they strive to meet society's demands for accessible, cost-effective, high-quality medical care. MM

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REFERENCES

1. Koska MT. Restructuring cardiac services: M.D.s are key to continued success. *Hospitals* 1991;65(12):52-4.
2. Hennepin County Hospital discharge statistics, Council of Hospital Corporations, 1991.
3. Brilliant vertical integration: conclusions from 35 top primary care networks in North America. Washington, DC: Health Care Advisory Board Company, 1990.
4. The Cost and Production Survey Report. Denver: Medical Group Management Association, 1990.
5. Anderson HJ. Are hospitals ready for more growth in ambulatory care? *Hospitals* 1991;65(12):32-7.
6. Physician supply and utilization by specialty: trends and projections. Chicago: AMA Center for Health Policy Research, 1988.
7. Summary report of the Graduate Medical Education National Advisory Committee to the Secretary. Washington, DC: Department of Health and Human Services; 1980 Sept. Vol 1.

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Closing Thoughts

Thomas A. Stolee, M.D.

This is my last column as your president. It's hard to believe the year has gone by so quickly. It's been a momentous year on many fronts and one filled with activities that have been exhausting, sometimes frustrating, occasionally confrontative, but usually productive, and I've always felt privileged to represent you. During my term as president, I've concentrated on communications and issues. In this last column, I would like to address some broader conceptual concerns.



"We must not forget
that our first
responsibility is to
the patient."

Communication with our membership is a major concern of mine. We have an excellent Communications Committee chaired by Dr. Barclay Cram and a fine staff led by Mark Vukelich. However, it is difficult to communicate with our constituency if doctors choose not to come to meetings to hear about issues and to present ideas. I found it frustrating to drive 200 miles to and from a three-hour county medical society meeting attended by only a handful of the society's 100 members. It is similarly difficult to communicate if people choose not to read. Frequently, doctors complain that they are not informed about a matter or that they feel the MMA has not addressed a problem when the issue has been well aired in the *Monitor*, this journal, or another MMA publication. Somehow, we need to establish better communication with all our members.

My second concern is that payers are too often calling the shots. For whom do we work? If we follow the ethical tradition of medicine, the answer is clear: We work for our patients. We must be our patients' advocates. Yet, with third parties' increased involvement in medicine, I have seen a disquieting tendency to respond to the payer instead of the

patient—"He who pays the piper calls the tune." We must not forget that our first responsibility is to the patient.

My third concern is related to community responsibility. The seventh precept of the AMA Principles of Medical Ethics is as follows: "A physician shall recognize a responsibility to participate in activities contributing to an improved community." Yet, it appears that volunteerism is a dying concept. There seems to be an increasing number of people, including some physicians, who put personal lifestyle above profession, professionalism, and community support activities. Each of us has been given only a few years on this planet. Far better to concentrate on improving the size and quality of the pie than on getting as much of it as we can for ourselves.

That leads me to my final conceptual concern—money. Physicians spend many years in training; they work long hours, incur rather massive educational debt, have major responsibility and liability, and are

subject to severe stress. For this they receive a commensurate income. However, the border between deserved reward and greed sometimes becomes a little fuzzy. A medical license is a license to serve, not an entrepreneurial ticket. We should all stand back a minute and reflect on our goals.

Now, as I end the year, I want to acknowledge the many people to whom I am indebted. Our board chair, Andrew Smith, and our CEO, Paul Sanders, have become brothers to me. They, along with the rest of our executive committee, are honest, goal-oriented, helpful, and professional. Our Board of Trustees is wise, hard-working, and dedicated to the membership and to your patients. These people will have a special place in my heart forever.

Then there is our staff. I started listing the people on our staff with whom I've worked and for whom I've developed great admiration and respect. As I perused the names of the people in policy, legislation, communications, internal affairs, finance, legal affairs, membership services, *Minnesota Medicine*, and support positions. I realized I had named our whole staff. To designate any as special suggests that others are not. I want our membership to know how wonderful these people are and how dedicated they are to you. To our staff—Godspeed and a sincere thank you, more than you'll ever know.

How fortunate I am to have had a very supportive medical staff here at Miller-Dwan Medical Center. As a pathologist, I am a hospital-based physician, and the support I've received from our administration, led by Buzz Palmer, has been tremendous. Special thanks are in order also to my associate, Dave Blomberg, and his wife, Cindy. My many absences

have created long, long hours for Dave.

Lastly, but mostly, I want to publicly acknowledge how fortunate I am to have married the lady I did 35 years ago this past August 24. She has been an absolute mountain of support and strength. Her conviction is to be right, be honest, be fair, and never give up.

Finally, I wish to thank the Minnesota Medical Association for giving me an honor and opportunity that few have had. We had our good days and our bad, but I hope I did not disappoint you. I gave it everything I had. As I leave the presidency, I am convinced that the organization is strong. We have begun many new projects, and I see exciting days ahead.

This month, I turn over the leadership to Stuart Hanson. I have known Stu for many years and can assure you that he is eminently qualified for the job, especially during these troubled times. He has a discerning eye, a ready ear, an honest heart, and an open and analytic mind. He will do a superb job for us.

MM

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People and Places Making Medical News

People

AHA President-Elect

The American Heart Association has named James H. Moller, M.D., president-elect. Moller, a professor in pediatric cardiology at the University of Minnesota Hospital, has been an AHA volunteer for 27 years and has served on its national board of directors since 1986.

The AHA also named David A. Ness of Minneapolis to serve on its board of directors. Ness, the director of Corporate Compensation for Benefits and Human Resources Information Systems at Medtronic, Inc., has served as a board member for the Minnesota affiliate since 1984.

U of M Obstetrics Chief

The University of Minnesota Medical School has appointed Leo B. Twiggs, M.D., chair of the Department of Obstetrics and Gynecology. Twiggs, who specializes in gynecologic oncology and joined the university in 1978, has been interim chair since Bruce Work, M.D., resigned as chair in 1990. He is director of the university's Women's Cancer Center, a professor of therapeutic radiology, a member of the American Cancer Society's professional education committee, and past president of the Minnesota Obstetrical and Gynecological Society.

Park Nicollet President and CEO

The Park Nicollet Medical Center board of trustees has elected Charles L. Jacobson, M.D., president and chief executive officer effective August 1, 1992. Most recently, Jacobson was vice president on the board of trustees and director of managed care, an area he developed for the organization.

Jacobson is also a clinical professor in endocrinology and metabolism at the University of Minnesota Medical School. He has been a member of the MedCenters Health Plan board of directors since 1987 and has served in a variety of management roles for Methodist Hospital in St. Louis Park since 1974. He joined Park Nicollet as a consultant in endocrinology in 1974.

PIAA Board Chief

The Physician Insurers Association of America recently elected David P. Bounk, president and chief executive officer of Midwest Medical Insurance Company, to a three-year term on its board of trustees at the association's 1992 annual meeting. PIAA is governed by a nine-member board of trustees. The association consists of 43 physician-owned medical professional liability insurance companies that provide medical malpractice insurance for approximately two-thirds of all practicing physicians in the United States.

Bounk joined MMIC as president and CEO in 1990. Before that, he served as executive vice president for Missouri Medical Insurance Company.

Places

Park Nicollet Receives Grant

Park Nicollet Medical Center is one of five medical centers from Oregon to Massachusetts cooperating in a study designed to document the best way for clinics and hospitals nationwide to do outcomes management.

The collaborative study is being supported by a \$98,436 grant from the New England Medical Center, Inc., in Boston through the auspices of the Henry J. Kaiser Family Foundation.

Participating with Park Nicollet

in the eight-month project are St. Vincent Hospital and Medical Center, Portland, Oregon; New England Medical Center Hospitals, Boston, Massachusetts; Cleveland Clinic Foundation, Cleveland, Ohio; and Henry Ford Health System, Detroit, Michigan. The five centers are among the first in the country to implement outcomes measures as part of routine patient care.

They will use the grant to identify and describe the best techniques for conducting outcomes management. Upon completion of the project in December 1992, the directors of the five participating sites will produce a checklist and manual designed to help health care institutions throughout the country establish their own outcome programs.

Abbott Transfers Radiologic Programs to St. Mary's Campus

To increase the pool of educated practitioners in radiologic technology, Abbott Northwestern School of Radiologic Technology and the College of St. Catherine have agreed to transfer Abbott's School of Radiologic Technology to the college's St. Mary's Campus. The field of radiologic technology will be one of the top 10 fastest growing occupations from now until the year 2005, according to the Bureau of Labor Statistics, and already there is a shortage of radiographers and sonographers. Abbott Northwestern Hospital currently serves as a clinical site for several St. Mary's programs.

The radiologic technology and ultrasonography programs, currently run by Abbott Northwestern Hospital in Minneapolis, will be transferred to St. Mary's Campus in 1993. Abbott Northwestern will continue to serve as the primary clinical site. As part of the transfer,

both programs will be changed from non-degree programs to two-year associate of applied science degrees. In addition, a one-year certificate will be offered for the ultrasonography program. The new programs will combine liberal arts study with technical coursework and will prepare students to complete the national registry exam in their area.

Socioeconomics

UHC Continues to Expand

Medco Containment Services Inc., the nation's largest mail-order supplier of prescription drugs, is negotiating to purchase Minnetonka-based United HealthCare Corp. Company officials said in July they were discussing "various business combinations," but would not elaborate. However, *CityBusiness* reported in July that sources close to the companies said the firms are discussing the possibility of Medco acquiring UHC.

Combining the two companies, which would create an organization with revenues of more than \$2 billion, would make strategic sense, said analysts, and would enhance both companies' efforts to expand their managed care services.

In addition, United has signed a letter of intent to purchase 50 percent ownership of Physicians Health Plan of North Carolina, it announced in August. The 50,000-plus member, Greensboro-based health plan, which has achieved 46 percent enrollment growth during the past year, currently contracts with UHC. Terms of the agreement were not disclosed. A final agreement is expected this month.

UHC also announced a 51 percent earnings increase over its second quarter one year ago. Its record results for the quarter ending June 30, 1992, mark 15 consecutive quarters of revenue and earnings growth. UHC's revenues were \$351.0 million, an 88 percent increase over second quarter 1991. Earnings were \$27.6

million, up 51 percent over last year's second quarter.

Mayo, Luther Hospital Plan Merger

Mayo Clinic, which announced a merger with Eau Claire's Midelfort Clinic in June, recently announced an agreement in principle to merge with Luther Hospital, a 310-bed acute care multispecialty hospital also in Eau Claire, Wisconsin. Both Luther and Mayo expect that all corporate documents will be signed before October 1.

Under the agreement, Luther employees will remain employees of Luther Hospital—a Mayo Regional Hospital. Luther will continue to serve the acute health care needs of Eau Claire and the surrounding area, and Mayo Clinic and its affiliated hospitals in Rochester will be one option for more specialized care.

Luther Hospital and Midelfort Clinic will work together more closely, especially on diagnostic services and record exchanges. Luther plans to expand its cardiology services, and Midelfort will add four or five heart specialists, said Douglas Trembath, president and chief executive officer of Luther Hospital.

HealthEast No Longer Treating Medica Choice Members

Because HealthEast and Medica were unable to agree on a new reimbursement contract, HealthEast hospitals will no longer provide services to Medica Choice patients effective September 1. The announcement affects 78,000 Medica Choice members in the east metro area, who will probably have to go to United Hospital, Children's Hospital of St. Paul, St. Paul-Ramsey Medical Center, Unity Hospital, or Riverside Medical Center. Other Medica plans and HealthEast services, such as HealthEast's transportation and home health care divisions, are not involved, said Roger Green, a spokesperson for HealthEast. Medica spokesperson Peter Fish said the company is negotiating with the other hospitals to see if

they can handle an increased number of admissions.

Green said HealthEast suffered large losses in the late 1980s, partially because of the deeply discounted contracts with HMOs and other managed care plans. "After our financial difficulties, the board of directors decided that all non-government contracts had to be raised," he said in a *St. Paul Pioneer Press* article published July 16. "This is the first payer who failed to make the journey with us."

Hennepin County to Open Brooklyn Center Clinic

Hennepin County plans to open a clinic in Brooklyn Center aimed at poor people and county employees who are members of Metropolitan Health Plan, the county's health maintenance organization. The county estimates that 14 percent of people in the metro area receiving Aid to Families with Dependent Children live within three miles of the clinic site at 6601 Shingle Creek Parkway.

The clinic, expected to open January 1, could be the first of several in the suburbs. The county is also considering clinics in Bloomington/Richfield, Hopkins, and Plymouth/Maple Grove. It already has clinics in north and south Minneapolis.

Blue Cross, Delta To Offer Joint Plan

Delta Dental and Blue Cross and Blue Shield of Minnesota will begin offering a joint medical-dental plan January 1, the firms announced in August. The partnership will allow the groups to maintain their identities, boards, and officers, but to develop and market products jointly. As part of the agreement, Delta will take over Blue Cross and Blue Shield's dental insurance business, which last year covered 150,000 people and brought in \$13 million of Blue Cross's \$99 million in premium revenue.

Blue Cross to Help Manage Pharmacy Services

Blue Cross and Blue Shield of Minnesota will help manage pharmaceutical services for more than three million federal workers nationwide, making it the largest managed retail pharmacy program in the nation, the company announced in July. It shares a contract with PCS Inc., a pharmacy network management firm based in Arizona. The contract is expected to generate \$27 million in annual revenue for the two firms and produce 75 new jobs at Blue Cross.

PCS will process drug claims and operate a national preferred provider network of 21,000 pharmacies. Blue Cross will provide customer service, maintain the drug formulary, and negotiate volume discounts with drug manufacturers.

The new program could save the federal government \$100 million a year in prescription drug costs, said Andy Czajkowski, president and chief executive officer of Blue Cross and Blue Shield of Minnesota.

Rates, Trends, Data

Deaths from Stroke Down in Twin Cities

The death rate from stroke is 60 percent lower in the Twin Cities metro area than it was 30 years ago, report University of Minnesota scientists in the August 12 *Journal of the American Medical Association*. "This is a remarkable public health triumph," said Paul McGovern, Ph.D., an assistant professor of epidemiology and lead author of the study. He said substantial declines in blood pressure and smoking in the Twin Cities are key factors that led to the decline. In addition, thousands of Minnesotans without high blood pressure have made other changes, such as losing excess weight, exercising regularly, and cutting down on salt consumption, further

reducing the rate of death from stroke, he said.

Innovations

Pancreatic Cells Could Control Blood Sugar

University of Minnesota researchers have discovered that an injection of pancreatic cells can produce enough insulin to keep blood sugar levels normal for years, according to a report in the July 23 *New England Journal of Medicine*. If the researchers can find anti-rejection drugs to protect the cells, diabetics could possibly be cured with a relatively simple, one-time injection, said Paul Robertson, M.D., professor of medicine and head of the university's diabetes center.

The researchers made the discovery by studying five non-diabetic patients who needed their pancreases removed because of chronic disease. After surgery, researchers isolated the insulin-producing islets of Langerhans cells in each patient's pancreas. After the cells were prepared, they were injected back into the patient through a vein leading to the liver. Too large to pass through the liver, the cells lodged there, and tests showed they continued to produce enough insulin to maintain proper blood sugar levels.

Researchers from the University of Michigan and the Veterans Affairs Medical Center in Ann Arbor, Michigan, participated in the study.

Mayo Performs Its First Heart-Liver Transplant

Mayo Clinic physicians performed the country's sixth heart-liver transplant in July—the first time the surgery has been performed in Minnesota. The patient, 47-year-old Richard Fenlon of Tulsa, Oklahoma, suffered liver and heart damage from hemochromatosis and was gravely ill by the time the donor organs became available. Christopher McGregor, M.B., F.R.C.S., and Richard C. Daly, M.D., performed the heart trans-

plant, and Jeffrey Steers, M.D., and Sylvester Sterioff, M.D., implanted the new liver. The operation took about 11 hours. A few days after surgery, Fenlon was making good progress, said McGregor.

Medical Research

Study Finds High Cancer Rates at a 3M Site

Cancer rates among 480 former and current building tradesmen at the 3M center in Maplewood were nearly double those of area residents, according to a Minnesota Health Department study. Health officials began an investigation in 1989 after a 3M employee complained that three of the four workers at a maintenance shop laboratory had developed cancer within two years.

In its survey of 480 men employed at the 3M center between 1975 and 1990, the department found that 35 were diagnosed with some kind of cancer. The craftsmen include millwrights, electricians, painters, steamfitters, welders, refrigeration and air-conditioning mechanics, tool and mold makers, fabricators, and machinists. The report urges 3M to monitor the Maplewood center for known and probable carcinogens and says industrial hygiene practices should be reviewed.

The Health Department's report did not look at specific lifestyle or occupational factors that could account for the higher cancer rates.

Cancer, Fatty Diet Link Questioned

Whether there's a link between high-fat diets and a woman's risk of breast cancer is not clear, report University of Minnesota researchers in the July 15 *Journal of the National Cancer Institute*. The researchers say most research on the issue may be flawed because the methods used to analyze data can influence whether a weak, strong, or no link is found.

The researchers analyzed eating habits of 34,388 Iowa women between the ages of 55 and 69 and used different statistical methods to assess the effect of dietary fat on the risk of developing breast cancer. Depending on whether they used total fat, type of fat, or percentage of calories from fat, the researchers found varying degrees of extra risk of breast cancer, but none of the risks was statistically significant, said the research team, headed by Lawrence Kushi, an assistant professor of epidemiology.

AIDS Update

Kaiser Allowed to Pursue Lawsuit

A Minnesota Supreme Court ruling will allow Patty Kaiser, a Bloomington woman who contracted the AIDS virus during a 1984 blood transfusion, to pursue her federal lawsuit against Memorial Blood Center of Minneapolis and the American Red Cross. The court ruled that Kaiser's suit qualifies as a civil negligence suite with a six-year statute of limitations instead of a medical malpractice claim with a two-year time limit.

The court said blood banks are not health care providers and that Kaiser's lawsuit is not a medical malpractice claim. Kaiser contracted the AIDS virus in 1984, but she did not know it until 1987, after Minnesota's two-year time limit on medical malpractice claims had already expired.

Pill Combination Fights Deadly Infections

Minnesota researchers reported July 20 at the eighth International Conference on AIDS in Amsterdam that a four-pill combination looks promising for fending off certain deadly infections that often strike people with the AIDS virus. Each of the four pills fights a different illness: herpes viruses, fungal infections, a deadly form of pneumonia, and a bacterial infection that can spread in the bloodstream.

Experts hadn't previously tried using all four pills together because

they feared it would cause serious side effects, but only one of the 24 Twin Cities-area patients in the study had to drop out because of side effects. Only three patients in the study have developed infections

the pills fight, and all are mild cases. This suggests that the multi-pill treatment is helping, said Keith Henry, M.D., one of the researchers and a physician at St. Paul-Ramsey Medical Center.

MM



K. James Ehlen, M.D.
Chairman, CEO Medica

HERE'S ONE SURE WAY TO REDUCE HEALTH CARE COSTS AND CUT THROUGH ADMINISTRATIVE RED TAPE

This month local physicians began participating in a demonstration project to measure savings in using electronic systems to transmit data between their offices and health care plans.

The project is directed by the national Work Group on Electronic Data Interchange (WEDI). It was set up in response to Dr. Louis Sullivan, Secretary of Health and Human Services, who challenged the industry to increase the number of claims moved electronically by at least 10 percent each year.

Medica, along with Blue Cross and Blue Shield of Minnesota, is participating in the project. These are the only two plans in the metropolitan area with computer systems advanced enough to carry the assignment.

The potential savings in such a system are impressive. WEDI has estimated savings on a national level in the range of \$4 billion to \$10 billion a year.

While electronic systems control costs that contribute to increases in operating expenses, they also provide you with more time to practice medicine and less time to manage the information flow. From Medica's point of view, administrative savings make more money available to pay for health care.

The WEDI project will help you evaluate this technology by measuring the experiences of physicians participating in the project and comparing the costs and benefits of investing in equipment.

The use of new electronic technology is an important message to purchasers, regulators and the general public that we are concerned with doing everything we can to squeeze unnecessary costs out of the health care system to make services more accessible.

Medica, through its participation in the WEDI project and the use of software, hardware and electronic networking available through "ProviderLink," is dedicated to helping you increase the speed, accuracy and efficiency of your practice management systems.

MEDICA

A Calendar of Continuing Medical Education Courses

Provided through the MMA Medical Education Subcommittee on CME Resources. For assistance with scheduling meetings or for information on future medical meetings and CME courses, please contact the MMA office: 2221 University Avenue SE, Suite 400, Minneapolis, Minnesota 55414; 612/378-1875. Information for each entry is arranged by date; name of program; primary sponsor; location; contact person.

SEPTEMBER 1992

Sept. 9-18 **Pain Management for the Primary Care Physician** Hennepin County Medical Center; Hennepin County Medical Center, Minneapolis, MN. CONTACT: Program Coordinator, 701 Park Avenue, Mail Code 867A, Minneapolis, MN 55415-1829; 612/347-2075.

Sept. 10-11 **Applied Clinical Research Methods** Hennepin County Medical Center; Hennepin County Medical Center, Minneapolis, MN. CONTACT: Ann Samways, 701 Park Avenue, Mail Code 867A, Minneapolis, MN 55415-1829; 612/347-2075.

Sept. 10-11 **Second Annual Children's Hospital of St. Paul Practical Pediatrics Course for the Primary Care Physician** Children's Hospital of St. Paul; United/Children's Conference Center, St. Paul, MN. CONTACT: Sue Hance, Health One Medical Education, 2810 57th Avenue North, Minneapolis, MN 55430; 612/574-7895 or 800/343-DOCS.

Sept. 10-11 **Hepatology Update 1992** Mayo Clinic/Mayo Foundation; Mayo Clinic, Rochester, MN. CONTACT: Rita Kunz or Jan Fleck, Postgraduate Courses, Section of CME, Siebens 5, Mayo Foundation, 200 1st Street SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

Sept. 11-12 **Lasers in Orthopedic Surgery** Laser Center of Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Laser Center 39102, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-3000.

Sept. 12-13 **University of Minnesota Weekend Update: Infectious Disease** Office of Continuing Medical Education, University of Minnesota Medical School; Canterbury Inn, Shakopee, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Sept. 14-18 **Team Management of Diabetes Mellitus** International Diabetes Center; International Diabetes Center, Minneapolis, MN. CONTACT: Cindy Poppitz, International Diabetes Center, 5000 West 39th Street, Minneapolis, MN 55416; 612/927-3393.

Sept. 17-18 **16th Annual Infection Control Conference, 20th Anniversary of APIC—Then and Now** Minnesota Association for Infection Control Practitioners; Northland Inn and

Conference Center, Brooklyn Park, MN. CONTACT: Wanda Brown, 421 Tower Road, St. Croix Falls, WI 54024; 715/483-3261.

Sept. 18 **Thrombolytic Therapy in Acute MI** Abbott Northwestern Hospital; Minneapolis Heart Institute, Minneapolis, MN. CONTACT: Minneapolis Heart Institute Foundation, 920 East 28th Street, Minneapolis, MN 55407; 612/863-3979.

Sept. 18-19 **Advanced Laparoscopic Abdominal Surgery Seminar** Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

Sept. 18-20 **Annual Ambulance Medical Directors Retreat** Hennepin County Medical Center; Breezy Point Resort, Breezy Point, MN. CONTACT: Ann Samways, 701 Park Avenue, Mailcode 867A, Minneapolis, MN 55415-1829; 612/347-2075.

Sept. 19-23 **Radiology '92: Imaging & Intervention—1992 and Beyond** Office of Continuing Medical Education, University of Minnesota Medical School; Mayo Memorial Auditorium, University of Minnesota, Minneapolis, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Sept. 23 **Biofeedback of Colorectal Disorders** Office of Continuing Medical Education, University of Minnesota Medical School; Moos Tower, University of Minnesota, Minneapolis, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Sept. 23 **Endorectal Ultrasonography** Office of Continuing Medical Education, University of Minnesota Medical School; Midway Hospital, St. Paul, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Sept. 24-25 **Pesticides: Health Effects from Work Exposure in the Upper Midwest** St. Paul-Ramsey Medical Center; St. Paul-Ramsey Medical Center, St. Paul, MN. CONTACT: Office of CME, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

Sept. 24-26 **Fourth International Vaginal Surgery Program** Hennepin County Medical Center; Ritz Carlton, St. Louis, MO. CONTACT: Ann Samways, 701 Park Avenue, Mailcode 867A, Minneapolis, MN 55415-1829; 612/347-2075.

Health One Office of Medical Education and Research

Selected Fall 1992 Seminars

September

10 & 11 **Second Annual Practical Pediatrics Conference** (Children's Hospital St. Paul) - United/Children's Hospital Conference Center, St. Paul (8:00am - 5:00pm)

12 **Cardiac Centers First Annual Physician Symposium: Sudden Cardiac Death and Syncope** - Health One Mercy Hospital, Coon Rapids (7:00am - 1:30pm)

October

2 & 3 **Epilepsy Progress Conference: Update on Medical and Surgical Treatment (MN Epilepsy Group PA)** - United/Children's Conference Center, St. Paul

9 **Insights and Outlooks '92 and the Eleventh Annual Jesse E. Edwards, MD, Lecture** - United/Children's Conference Center, St. Paul (8am - 6pm)

16 & 17 **Advanced Life Support in Obstetrics (ALSO) Course** - United/Children's Conference Center, St. Paul (7:30am - 5:00pm)

19 & 20 **Advanced Trauma Life Support (ATLS™) Course** - United/Children's Conference Center, St. Paul (7:30am - 5:00pm)

23 & 24 **Fifth Annual New Ulm Fall Seminar** - Holiday Inn, New Ulm

November

14 **Breast Cancer: New Frontiers in Diagnosis** - United/Children's Conference Center, St. Paul (7:30am - 12:10pm)

Educational Telephone Network 1992 Fall Scheduled Events

September

8 **Medical Imaging: What Test Shall I Order?** - Cornelius W. Wiens, MD, United Hospital St. Paul

22 **Lyme Disease: Diagnosis and Management** - Robert Tofte, MD, Health One Mercy Hospital

October

6 **The Short Stature Child: Who Should be Evaluated?** - Joseph J. Sockalosky, MD, Children's Hospital of St. Paul

20 **Hepatitis B: New Vaccine Recommendations** - Deborah L. Wexler, MD, United Hospital St. Paul

November

3 **Hyperlipidemia** - John Stack, MD, University of Minnesota

17 **Efficient Thyroid Testing: Is It Possible?** - William K. Natale, MD, United Hospital St. Paul

December

1 **Current Concepts in Oral Antibiotics** - Richard Quintiliani, MD, Hartford Hospital, Hartford, CT

For further information, contact the Office of Medical Education and Research, Health One. (612) 574-7895 or call toll-free 1-800-343-3627.

Health One
Medical Affairs Division

Sept. 24-26 **Principles of Colon and Rectal Surgery** Office of Continuing Medical Education, University of Minnesota Medical School; Mayo Memorial Auditorium, University of Minnesota, Minneapolis, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Sept. 25 **Duluth Diabetes Conference—Current Issues in Type I Diabetes Mellitus** The Duluth Clinic; Fitger's Spirit of the North Theatre, Duluth, MN. CONTACT: Rockie Odberg, 400 East Third Street, Duluth, MN 55805; 218/725-3838.

Sept. 25-27 **Mechanical Ventilation: Principles and Practice** Office of Continuing Medical Education, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Sept. 26 **Minnesota Radiological Society Fall Meeting** Minnesota Radiological Society; Radisson Hotel, Rochester, MN. CONTACT: Allen V. Bergh, M.D., 69 West Exchange Street, St. Paul, MN 55102; 612/291-3183.

Sept. 26 **Interventional Radiology, Surgery and Medicine: New Perspectives for the Primary Care Physician** Abbott Northwestern Hospital, Minneapolis Heart Institute Foundation, and Consulting Radiologists, Inc.; The Registry

Hotel, Bloomington, MN. CONTACT: Jillann Larson, CME Office 14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

Sept. 29-Oct. 9 **Canada/New England Air/Sea Cruise** North Central Medical Conference; Canada and New England. CONTACT: North Central Medical Conference, 1845 Hampshire Avenue, Suite 200, St. Paul, MN 55116; 612/698-1888.

OCTOBER 1992

Oct. 2-3 **Advanced Laparoscopic Abdominal Surgery Seminar** Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

Oct. 2-3 **Nursing Home Medical Directors Conference** Office of Continuing Medical Education, University of Minnesota Medical School; Sheraton Midway Hotel, St. Paul, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Oct. 3-4 **Burn Camp Workshop** St. Paul-Ramsey Medical Center; Holiday Inn East, St. Paul, MN. CONTACT: Office of CME, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

METROPOLITAN SPINE GROUP

SPINAL MICROSURGERY
SURGERY OF THE ADULT SPINE
SPINAL RECONSTRUCTIVE SURGERY
RADICULOPATHIES
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RESTORATION OF FUNCTIONAL LOSS
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As independent practitioners specializing in the field of spinal care, we are pleased to announce the formation of the Metropolitan Spine Group — a spinal care facility devoted to the comprehensive evaluation and functional restoration of complex problems of the degenerative spine.

This highly-specialized spinal care center will take a comprehensive, multidisciplinary approach to providing non-surgical and surgical solutions to back ailments. There will be a strong emphasis on conservative care.

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The Montevideo Clinic is a progressive and growing eight-physician multispecialty group practice in west-central Minnesota. We are recruiting BC/BE family practice physicians. Excellent benefits package includes: compensation based on production with low overhead deduction; comprehensive health, disability, and life insurance; and aggressive target and 401K pension plans. Signing bonus, moving expenses, and minimum salary guarantee. Submit detailed CV to:

Norman Hagberg, M.D.,
or Carol Lietzau, M.D.
The Montevideo Clinic, P.A.
908 North Eleventh Street
Montevideo, Minnesota 56265
612/269-6435; fax: 612/269-8186

Oct. 4-6 **Fifth National Conference on Sexual Compulsivity/Addiction** Office of Continuing Medical Education, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Oct. 8-9 **Annual Forensic Science Seminar** Hennepin County Medical Center; Hennepin County Medical Center, Minneapolis, MN. CONTACT: Dr. Garry Peterson, 701 Park Avenue, Mailcode 811, Minneapolis, MN 55415-1829; 612/347-2125.

Oct. 8-24 **China/Yangtze River Adventure** North Central Medical Conference; Beijing, Chongqing, Yangtze River/Three Gorges, Xian, Shanghai, Hong Kong. CONTACT: North Central Medical Conference, 1845 Hampshire Avenue, Suite 200, St. Paul, MN 55116; 612/698-1888.

Oct. 9 **Current Clinical Cardiology for Physicians & the 11th Annual Jesse E. Edwards, M.D., Lecture** St. Paul Health Clinic/Health One Corporation; United/Children's Conference Center, St. Paul, MN. CONTACT: Eleanor Waldrup, 333 North Smith, St. Paul, MN 55102; 612/220-8558 or 800/343-DOCS.

Oct. 9 **Annual Contemporary Issues in Dialysis Therapy** Hennepin County Medical Center; Sheraton Midway Hotel, St. Paul, MN. CONTACT: Ann Samways, 701 Park

Avenue, Mailcode 867A, Minneapolis, MN 55415-1829; 612/347-2075.

Oct. 9 **Health Care Access: A Matter of Justice** St. Paul-Ramsey Medical Center; Holiday Inn East, St. Paul, MN. CONTACT: Office of CME, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

Oct. 9-10 **Adolescent Medicine and Health Care** Office of Continuing Medical Education, University of Minnesota Medical School; Park Inn International, Minneapolis, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Oct. 10 **University of Minnesota Weekend Update: Oncology, Cardiology** Office of Continuing Medical Education, University of Minnesota Medical School; St. James Hotel, Red Wing, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Oct. 14-16 **Internal Medicine Review** Office of Continuing Medical Education, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Oct. 15-16 **Primary Care Treatment for Pressure Sores**

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Fall-Spring Conference Schedule

Mark your calendar now for these upcoming conferences:

1992

- October 3-4 Burn Camp Workshop, Lake George, MN
- October 9 Health Care Access: A Matter of Justice, St. Paul
- October 16 Anxiety: The Interface Between Biology & Behavior, Minneapolis
- October 29-30 Trauma Management for Primary Care Providers, St. Paul
- November 12-14 Strategies in Primary Care Medicine, St. Paul
- November 20 Ramsey Research Conference, St. Paul
- December 3-5 Cardiopulmonary Medicine, St. Paul

1993

- February 19 Burn Care Today, St. Paul
- March 11-12 Family Medicine Today, St. Paul
- March 19 Occupational Medicine Update, Minneapolis
- March 25-26 Critical Care 1993: Practical Approaches & Case Discussions, St. Paul
- April 1-2 Ob/Gyn Update, St. Paul
- April 2 ENT Update for Primary Care Physicians, St. Paul
- April 16 Domestic Violence: Healing the Family

Information and Registration:

Continuing Medical Education, St. Paul-Ramsey Medical Center,
640 Jackson Street, St. Paul, MN 55101; Phone 612/221-3992



640 Jackson Street
St. Paul, MN 55101
(612) 221-3992

RAMSEY

Hennepin County Medical Center; Hennepin County Medical Center, Minneapolis, MN. CONTACT: Ann Samways, 701 Park Avenue, Mailcode 867A, Minneapolis, MN 55415-1829; 612/347-2075.

Oct. 15-16 **Trauma and Critical Care Conference** Hennepin County Medical Center; Radisson Hotel and Conference Center, Plymouth, MN. CONTACT: Julie S. Peck, 701 Park Avenue, Mailcode 967A, Minneapolis, MN 55415-1829; 612/347-2075.

Oct. 16 **Anxiety: The Interface Between Biology & Behavior** St. Paul-Ramsey Medical Center, Anxiety Disorders Clinic and Office of CME; Holiday Inn East, St. Paul, MN. CONTACT: Office of CME, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

Oct. 19-20 **Advanced Trauma Life Support (ATLS)** Health One Corporation; United/Children's Conference Center, St. Paul, MN. CONTACT: Sue Hance, Health One Medical Education, 2810 57th Avenue North, Minneapolis, MN 55430; 612/574-7895 or 800/343-DOCS.

Oct. 22-23 **23rd Annual Autumn Seminar: Obstetrics and Gynecology and Women's Cancer Symposium** Office of Continuing Medical Education, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.



ALEXANDRIA CLINIC, P. A.

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- OBSTETRICS & GYNECOLOGY
- FAMILY PRACTICE
- PEDIATRICS

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Alexandria Clinic, P.A.
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Vascular Surgery • Neurosurgery**

A test program is being conducted which offers a bonus to eligible physicians who reside in certain geographic areas (Pennsylvania, West Virginia, Ohio, Michigan, Illinois, Indiana, Wisconsin, Minnesota and Iowa). You would receive a \$10,000 bonus for each year you serve as an Army Reserve physician—for a maximum of three years.

You may serve near your home, at times convenient for you, or at Army medical facilities in the United States and abroad. There are also opportunities to attend conferences and participate in special training programs, such as the Advanced Trauma Life Support Course.

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Jennifer J. Mitchell
Fairview Clinic Services
600 West 98th Street, Suite 390
Bloomington, MN 55420
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- The publisher reserves the right to decline or withdraw advertisements. The publisher is not responsible for clerical or typographical errors and is not permitted to divulge the identity of advertisers who have replies sent to box numbers.
- Cancellation of ads must be made by the first of the month preceding month of issue.

Healthcare Resource Group works with clients seeking additional physician associates for practices both locally and nationally. Physicians who work with us know that confidentiality is respected and their CVs are not advanced without personal approval. This personal and professional approach has provided valuable assistance to both clients and candidates seeking relocation or an alternative professional affiliation. For further information, please send your CV or call Liz Johnson, Healthcare Resource Group, 9072 Preserve Blvd., Eden Prairie, MN 55347; 612/828-6890.

(6/92-R)

Internist to join a progressive 13-physician group practice. Rural college town 30 miles from St. Paul, Minnesota. New clinic and constructing new hospital. Contact: Robert B. Johnson, M.D., River Falls, WI 54022; 715/425-6701.

(*9/91-R)

Mankato: FP partner to join four board-certified family physicians, ages 34-43, in fast-growing, full-range practice. ob optional. Population 40,000+. Seventy miles to Twin Cities. Four colleges nearby. Subspecialty consultation readily available on hospital staff. Academic appointment available. Call: Tony Giefer, M.D., 507/387-8231. (8/91-R)

Family Physicians: Well-established south suburban Minneapolis family practice group seeks associates part/full time to staff day clinic. Excellent call schedule, salary, and fringe benefits. Also seeking locum tenens to staff PT/FT Urgent Care Centers and/or day clinic. Contact: Administration, Family Physicians, P.A., 612/435-4125, or send inquiries to Suite 100, 14050 Nicollet Avenue South, Burnsville, MN 55337.

(*9/89-R)

Mankato Clinic, Ltd. is seeking BC/BE physicians in the following specialties: invasive cardiology, oncology/hematology, pulmonary medicine, general surgery, gastroenterology, family practice, and general internal medicine. The Mankato Clinic is a 53-physician multispecialty group

practice in south-central Minnesota with a trade-area population of +250,000. Guaranteed salary first year, incentive thereafter with full range of benefits and liberal time off. For more information call: Dr. B. C. McGregor, President, or Roger Greenwald, Executive Vice President, 507/625-1811 or write: 501 Holly Lane, Mankato, MN 56001.

(12/91-R)

BC/BE Internal Medicine and Ob/Gyn Physician: Excellent opportunity to join a well-established, progressive, 26-physician multispecialty group located in an economically sound community of 22,000 (drawing area of 45,000), 65 miles south of the Twin Cities. Full membership after one year. Competitive salary and fringe benefits package. Contact: Craig Oien, M.D., or Terry Tone, Administrator, 134 Southview, Owatonna, MN 55060; 507/451-1120.

(9/92-R)

Forest Lake Doctor's Clinic is seeking a BC/BE family physician, pediatrician, ob/gyn, and internist to join 10-physician multispecialty group. Located 25 miles north of Minneapolis-St. Paul in progressive community with excellent schools, many beautiful lakes, recreational activities, golf, fishing, boating, skiing. Local hospital directly across street. Contact: Dr. Harvey J. Frank or Dr. Doug Sill, 121 SE 11th Avenue, Forest Lake, MN 55025; 612/464-7100.

(4/90-R)

MDsearch assists medical groups and hospitals in their recruiting efforts. For confidential information on opportunities in the Upper Midwest, send CV and/or call collect: Mary Jo Cordes, MDsearch, PO Box 21507, St. Paul, MN 55121; 612/454-7291.

(12/91-R)

Lake City, Minnesota: Family physician BC/BE needed to join three other FPs in progressive, growing practice on Lake Pepin/Mississippi River in southeastern Minnesota. Excellent first-year salary/benefits in a scenic community with multiple recreational opportunities. Contact: D.D. Pflaum, M.D., 303 South Washington, Lake City, MN; 612/345-3318.

(8/90-R)

Olmsted Medical Group is seeking BC/BE physicians in the following specialties: orthopedics, radiology, family practice, emergency medicine, and ob/gyn. Great opportunity for well-trained physicians to join a 55+ physician multispecialty group in a dynamic, progressive practice. In addition to the main office in Rochester, the group operates eight branch offices in southeastern Minnesota. Excellent salary/benefits package includes malpractice insurance, flexible benefits plan, 401(k) and profit sharing, and relocation assistance. Send CV to: Olmsted Medical Group, Attn: Susan Schuett, 210 Ninth Street SE, Rochester, MN 55904.

(1/92-R)

Downtown Office Space for Rent: Physician in the Medical Arts Building, 825, wishes to sublet to another physician on a part-time basis for the purpose of sharing overhead expenses. Call: 612/370-0553. (6/90-R)

Wisconsin: 120-physician multispecialty clinic in the Fox River Valley of northeastern Wisconsin desires two BC/BE pediatricians to join department of 15 BC/BE pediatricians. Excellent compensation and benefits package, leading to shareholder status after two years. The community offers a superb recreational, cultural, and family environment in which to practice. For information please call or write: Howard Kidd, M.D., La Salle Clinic, 411 Lincoln Street, Neenah, WI 54956; 414/727-4276. (3/91-R)

Family Physician wanted to join three board-certified M.D.s in well-established, expanding group practice. Weekend ER coverage. No buy-in. Financial package hard to beat. Enjoy a progressive, rural city within easy reach of St. Cloud and Minneapolis. Contact: Dr. Jim Mohs, Melrose Clinic, 603 West Main Street, Melrose, MN 56352; office, 612/256-4228; home, 612/256-3488. (4/91-R)

Internal Medicine, Pediatrics, and Dermatology practice opportunities available at the Faribault Clinic. The Faribault Clinic is a multispecialty group practice of 19 physicians. Faribault is located 50 miles south of Minneapolis on I-35. For more information contact: Ray W. Wood, M.D., or Ken Smith, Administrator, 924 NE First Street, Faribault, MN 55021; 507/334-3921. (4/90-R)

bault, MN 55021; 507/334-3921. (4/90-R)

Stillwater: Multispecialty group with emphasis on primary care seeking BC/BE family physician, pediatrician, and internist. Scenic location with excellent school system, supportive medical community with strong local hospital, competitive salary and benefits. Send CV to: Jon Pedersen, St. Croix Valley Clinic, 921 Greeley, Stillwater, MN 55082; 612/439-2215. (12/92-R)

Pediatrician wanted to join group of five board-certified pediatricians in a well-established, progressive group practice. Located in Minneapolis, minutes away from Children's Medical Center. Small practice stressing patient care and preventive medicine. Contact: Gregg Savitt, M.D., 3145 Hennepin Avenue, Minneapolis, MN 55408. (9/91-R)

Family Physician wanted to join five-physician, two-P.A., two-site family practice group in St. Anthony and Shoreview. Ob available. Competitive salary, benefits package, and call schedule. Contact: Gerald Pitzl, M.D., Silver Lake Clinic PA, 612/788-9251. (7/91-R)

Ideal Internal Medicine Practice: Excellent opportunity for BC/BE internist to establish a prosperous practice. Progressive 107-bed community hospital with a medical staff of 45 physicians and a service-area population of over 45,000. Vibrant Northern Michigan community with all summer

GENERAL INTERNIST

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Opportunity available in a growing physician clinic of specialists and subspecialties of internal medicine in St. Cloud, Minnesota. Community has three colleges, excellent school system, and abundant recreational activities. Family living conditions are excellent! The St. Cloud Clinic is located in a new facility with access to the latest medical technological developments.

For more information about this position, please contact:

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Mark Murphy, Administrator
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Ideal Position- Ideal Community Grand Rapids Minnesota

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Itasca Clinic
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Insights & Outlooks

Eleventh Annual Symposium On Cardiology Friday, October 9, 1992

- A one-day conference of practical cardiac applications designed specifically for family practitioners and internists
- Updates on diagnostic and therapeutic advances by leading cardiologists
- Highlight: The Jesse E. Edwards, M.D. Lectureship, presented by Mayo Clinic's Dr. A. Jamil Tajik

Call for more information, or to pre-register:

Mark Turnbull,	Sue Hance,
St. Paul Heart Clinic	Health One
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612-292-0616	612-574-7895

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Guaranteed first-year salary and production program thereafter with a full fringe benefits package.

Call or send CV to:

Daryl Mathews, Administrator
St. Cloud Medical Group
1301 West St. Germain Street
St. Cloud, MN 56301
Phone: 612/251-8181

and winter recreational activities. Salary guarantee of \$110,000 with excellent benefits. Send CV or contact: John Schon, Administrator, Dickinson County Hospitals, 400 Woodward Avenue, Iron Mountain, MI 49801; 800/236-3240. *1-9/92

Family Practice: Physicians seeking a BC/BE family practice physician for the Norway, Michigan, service area. The physician would have the option of joining one of the existing practices and/or setting up his/her own practice. Anderson Memorial Hospital is a part of Dickinson County Hospitals and has a service-area population of over 45,000. Contact: Dr. Paul Hayes' office, 906/563-9255, or Dr. William Gladstone's home, 906/563-8743. Anderson Memorial Hospital, Main Street, Norway, MI 49870; 906/563-9243. *1-9/92

Alexandria, Minnesota: Three-person internal medicine group desires to add a fourth partner. Send CV to J. E. McCrery, M.D., 1527 Broadway, Alexandria, MN 56308. 6-9/92

New '92 Cars, Minivans, and Trucks—Save \$\$: Pay only a few hundred dollars over actual dealer cost! All makes and models. Full factory warranty. Save money. Save time. Save aggravation. Dealership delivery. Call Tom Rush at Auto Direct, 612/342-2886. (*4/92-R)

Falls Medical Search Seeks Physicians for practice opportunities locally and nationally. To explore new practice options confidentially, send your CV or call: Pat Falls, Falls Medical Search, 34 Forest Dale Road, Minneapolis, MN 55410; 612/922-0207 or 800/383-8916. (*5/92-R)

General Surgeon: Five-man family practice group seeks surgeon. Only clinic in city of 8,000, one hour from Minneapolis. Position should generate adequate salary and lots of family time. Please contact James W. Dey, M.D., or Ruth Hawker, Clinic Manager, 501 North State Street, Waseca, MN 56093; 507/835-3110. (5/92-R)

One or Two Family Practice Physicians to join five family practitioners. Population 8,000. One hour south of Burnsville Center. Lakes, industry, negotiable salary. Clinic adjacent to hospital. Ample free time to enjoy family life. Contact James W. Dey, M.D., or Ruth Hawker, Clinic Manager, 501 North State Street, Waseca, MN 56093; 507/835-3110. (5/92-R)

Well-Established Family Practice available in rural northern Minnesota. As busy as you choose to be. Dispensary, small lab, and x-ray in office. New 80-bed regional hospital, well equipped, additional expansion in planning stage. Specialty consultants available. Near Boundary Waters Canoe Area, skiing, fishing, hunting, and clean air. New K-12 school with achievement scores above state and national average. State university, two community colleges, and vo-tech nearby. Write Gordon W. Franklin, M.D., Box 1 South Route, Northome, MN 56661; or call: 218/897-5222 or 218/897-5272 evenings. (5/92-R)

Pediatrics, General Surgery, Family Practice—Wisconsin:

Single-specialty groups seek BC/BE physicians for partnership in exceptional south-central community. Shared call, fully equipped and staffed office, very competitive guaranteed salary, and comprehensive benefits package. **Family Practice—Minnesota:** Single specialty group practice in Minnesota River Valley community of 9,000 located 25 miles from Minneapolis seeks family physician for broad-based primary care. **Locum Tenens** positions available throughout Minnesota. For information on these and other opportunities in the Upper Midwest, send CV to: Mary Jo Cordes, President, MDsearch, PO Box 21507, St. Paul, MN 55121; or call collect 612/454-7291, Fax: 612/454-7277.

*4-9/92

The Morris Medical Center, P.A., is currently seeking a family practitioner to join our multispecialty group. Morris, Minnesota, is a community of 5,500 residents with a four-year liberal arts college. Contact: Mike Flicker, Administrator, PO Box 600, Morris, MN 56267; 612/589-3232.

6-12/92

Manitowoc, Wisconsin: The Manitowoc Clinic, an 18-physician multispecialty group, is seeking BC/BE general surgeons, pediatricians, and obstetrician/gynecologists. Lovely community of 35,000 located mid-state on the shore of Lake Michigan. Guaranteed first-year salary and excellent benefits package. Contact or send CV to: James Robinson, Administrator, 601 Reed Avenue, Manitowoc, WI 54221-1270. Telephone: 414/682-8841.

3-9/92

Wisconsin—Fourth BC/BE Obstetrician/Gynecologist needed to join stable, progressive, primary-care-based HMO/group practice in university town of 60,000 near Minneapolis/St. Paul. Excellent quality of life and outstanding recreational area. Competitive salary and fringe benefits. Contact: Stuart R. Lancer, M.D., M.B.A., Medical Director, Group Health Cooperative, PO Box 3217, Eau Claire, WI 54702-3217; 715-836-8552.

*3-9/92

Wisconsin—Family Practitioner Needed by progressive and growing group practice in west-central Wisconsin city of 60,000. Ninety miles from Minneapolis/St. Paul. Primarily prepaid practice with large component FFS. Highly competitive salary with excellent fringe benefits. Practice high-quality care in a good recreational area. Send CV to: Stuart R. Lancer, M.D., M.B.A., PO Box 3217, Eau Claire, WI 54702-3217; 715/836-8552.

*3-9/92

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Rapidly expanding family practice group, doing traditional family practice, needs an additional board-certified FP. Call Ken Muckala, M.D., Harvard Family Physicians, PC, Tulsa, OK; 918/743-8200.

2-9/92

Oshkosh, Wisconsin: Medical groups are recruiting in internal medicine, pulmonology, rheumatology, gastroenterology, ob/gyn, family practice, child psychiatry, and ophthalmology. Mercy Medical Center has an active medical staff of 100 physicians in all medical specialties. Oshkosh is an



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2-9/92

Family Practice, Southwest Iowa—BC/BE: Excellent opportunity for two FPs to join multispecialty clinic in Creston, Iowa. Ob optional, limited call, progressive 83-bed hospital, competitive salary and benefits package in a family-oriented community. Send CV to Mike Brentnall, Administrator, Creston Medical Clinic, P.C., 526 New York Avenue, Creston, Iowa 50801; 515/782-2131.

4-11/92

Internal Medicine, Midwest Bedroom Community: Enjoy a hassle-free, high-income internal medicine practice in a medical community refreshingly free of politics. Located just 25 minutes from a major metropolitan area of 1 million, you will appreciate ready access to pro sports, symphony, and cultural amenities without giving up the benefits of affordable housing, great schools, and small-town values. Substantial hospital-sponsored net guarantee and generous relocating assistance. Send your CV to Bill Sweeney at HKA Midwest Region, 5420 Southern Avenue West, Suite 407,

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Indianapolis, IN 46241; or call 800/776-7901, Ext. 2-123, and I can share with you the details first hand. You can also fax your CV to my attention at 317/247-8533. Discretion is assured.
*3-10/92

Internist: Regional treatment center interested in full-time BC/BE internist. Forty hours/week. Competitive salary and benefits. Live in the exciting Brainerd Lakes area. Send CV to: Chief of Medicine, Brainerd Regional Human Services Center, 1777 Highway 18 East, Brainerd, MN 56401.
*6-1/93

Pain Fellowship: Immediate Opening. Position for PGY4 or PGY5 to participate in a one- or two-year program of clinical pain management and clinical or basic research beginning immediately, sponsored by the Department of Neurology, Hennepin County Medical Center in Minneapolis. The program is one that maintains an active outpatient practice and sees hospitalized patients on a referral basis from all departments. Opportunities to learn pharmacological management, acupuncture, peripheral nerve blockade, biofeedback techniques, and other areas related to pain are available. Hennepin County Medical Center is an equal opportunity educator and employer and specifically encourages applications from women and minorities. Application and CV should be sent to Miles J. Belgrade, M.D., Director, Hennepin Pain Clinic, Department of Neurology, Hennepin County Medical Center, 701 Park Avenue South, Minneapolis, MN 55415.
*2-9/92

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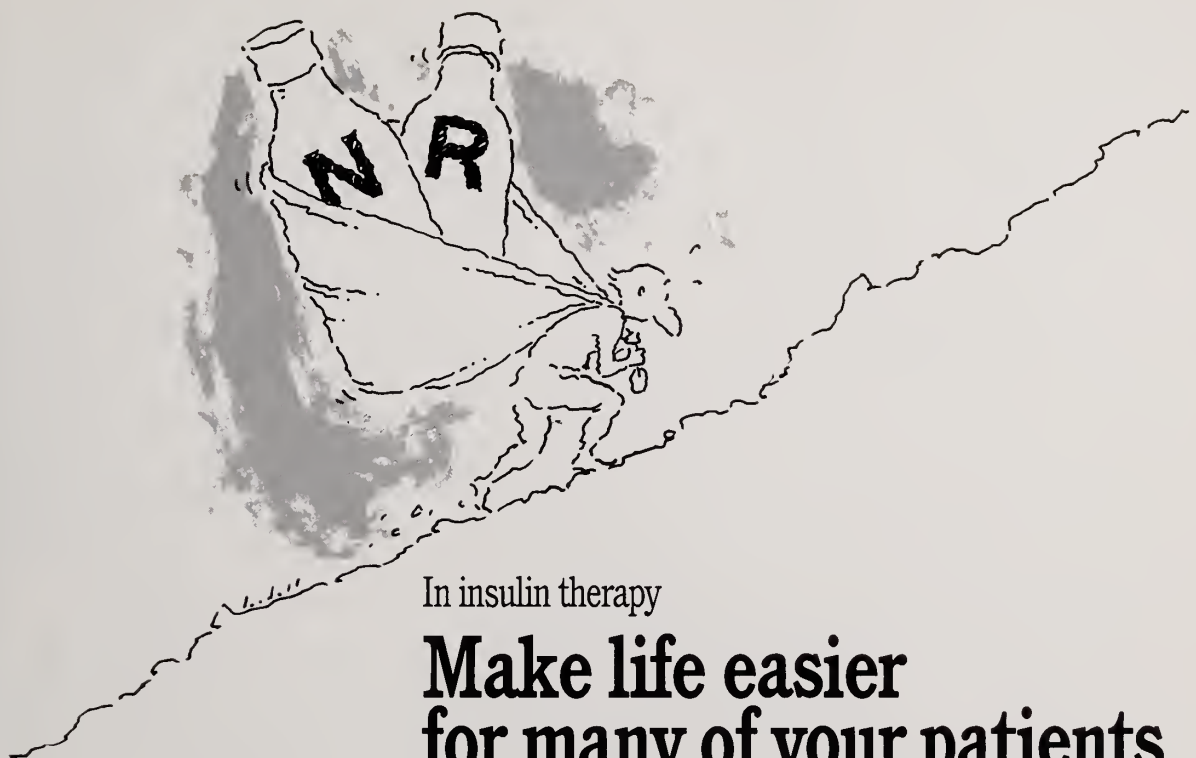
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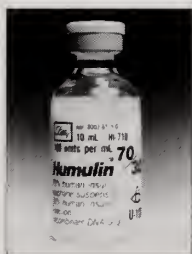
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†Constipation, which is easily managed in most patients, is the most commonly reported side effect of Calan SR.

‡Verapamil should be administered cautiously to patients with impaired renal function.

BRIEF SUMMARY

Contraindications: Severe LV dysfunction (see *Warnings*), hypotension (systolic pressure < 90 mm Hg) or cardiogenic shock, sick sinus syndrome (if no pacemaker is present), 2nd- or 3rd-degree AV block (if no pacemaker is present), atrial flutter/fibrillation with an accessory bypass tract (eg, WPW or LGL syndromes), hypersensitivity to verapamil.

Warnings: Verapamil should be avoided in patients with severe LV dysfunction (eg, ejection fraction < 30%) or moderate to severe symptoms of cardiac failure and in patients with any degree of ventricular dysfunction if they are receiving a beta-blocker. Control milder heart failure with optimum digitalization and/or diuretics before Calan SR is used. Verapamil may occasionally produce hypotension. Elevations of liver enzymes have been reported. Several cases have been demonstrated to be produced by verapamil. Periodic monitoring of liver function in patients on verapamil is prudent. Some patients with paroxysmal and/or chronic atrial flutter/fibrillation and an accessory AV pathway (eg, WPW or LGL syndromes) have developed an increased antegrade conduction across the accessory pathway bypassing the AV node, producing a very rapid ventricular response or ventricular fibrillation after receiving I.V. verapamil (or digitalis). Because of this risk, oral verapamil is contraindicated in such patients. AV block may occur (2nd- and 3rd-degree, 0.8%). Development of marked 1st-degree block or progression to 2nd- or 3rd-degree block requires reduction in dosage or, rarely, discontinuation and institution of appropriate therapy. Sinus bradycardia, 2nd-degree AV block, sinus arrest, pulmonary edema and/or severe hypotension were seen in some critically ill patients with hypertrophic cardiomyopathy who were treated with verapamil.

Precautions: Verapamil should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) or impaired renal function, and patients should be monitored for abnormal prolongation of the PR interval or other signs of overdosage. Verapamil may decrease neuromuscular transmission in patients with Duchenne's muscular dystrophy and may prolong recovery from the neuromuscular blocking agent vecuronium. It may be necessary to decrease verapamil dosage in patients with attenuated neuromuscular transmission. Combined therapy with beta-adrenergic blockers and verapamil may result in additive negative effects on heart rate, atrioventricular conduction and/or cardiac contractility; there have been reports of excessive bradycardia and AV block, including complete heart block. The risks of such combined therapy may outweigh the benefits. The combination should be used only with caution and close monitoring. Decreased metoprolol and propranolol clearance may occur when either drug is administered concomitantly with verapamil. A variable effect has been seen with combined use of atenolol. Chronic verapamil treatment can increase serum digoxin levels by 50% to 75% during the first week of therapy, which can result in digitalis toxicity. In patients with hepatic cirrhosis, verapamil may reduce total body clearance and extrarenal clearance of digoxin. The digoxin dose should be reduced when verapamil is given, and the patient carefully monitored. Verapamil will usually have an additive effect in patients receiving blood-pressure-lowering agents.

References: 1. Data on file, Searle. 2. Edmonds D, Würth JP, Baumgart P, et al. Twenty-four-hour monitoring of blood pressure during calcium antagonist therapy. In: Fleckenstein A, Laragh SH, eds. *Hypertension—the Next Decade: Verapamil in Focus*. New York, NY: Churchill Livingstone; 1987:94-100. 3. Midtbo KA. Effects of long-term verapamil therapy on serum lipids and other metabolic parameters. *Am J Cardiol*. 1990;66:131-151. 4. Fagher B, Henningsen N, Hulthén L, et al. Antihypertensive and renal effects of enalapril and slow-release verapamil in essential hypertension. *Eur J Clin Pharmacol*. 1990;39(suppl 1):S41-S43. 5. Schmieder RE, Messerli FH, Garavaglia GE, et al. Cardiovascular effects of verapamil in patients with essential hypertension. *Circulation*. 1987;75:1030-1036. 6. Midtbo K, Lauve O, Hals O. No metabolic side effects of long-term treatment with verapamil in hypertension. *Angiology*. 1988;39:1025-1029.

Disopyramide should not be given within 48 hours before or 24 hours after verapamil administration. Concomitant use of flecainide and verapamil may have additive effects on myocardial contractility, AV conduction, and repolarization. Combined verapamil and quinidine therapy in patients with hypertrophic cardiomyopathy should be avoided, since significant hypotension may result. Concomitant use of lithium and verapamil may result in an increased sensitivity to lithium (neurotoxicity), with either no change or an increase in serum lithium levels; however, it may also result in a lowering of serum lithium levels. Patients receiving both drugs must be monitored carefully. Verapamil may increase carbamazepine concentrations during combined use. Rifampin may reduce verapamil bioavailability. Phenobarbital may increase verapamil clearance. Verapamil may increase serum levels of cyclosporin. Verapamil may inhibit the clearance and increase the plasma levels of theophylline. Concomitant use of inhalation anesthetics and calcium antagonists needs careful titration to avoid excessive cardiovascular depression. Verapamil may potentiate the activity of neuromuscular blocking agents (curare-like and depolarizing); dosage reduction may be required. There was no evidence of a carcinogenic potential of verapamil administered to rats for 2 years. A study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. Pregnancy Category C. There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor, and delivery only if clearly needed. Verapamil is excreted in breast milk; therefore, nursing should be discontinued during verapamil use.

Adverse Reactions: Constipation (7.3%), dizziness (3.3%), nausea (2.7%), hypotension (2.5%), headache (2.2%), edema (1.9%), CHF, pulmonary edema (1.8%), fatigue (1.7%), dyspnea (1.4%), bradycardia: HR < 50/min (1.4%), AV block: total 1°, 2°, 3° (1.2%), 2° and 3° (0.8%), rash (1.2%), flushing (0.6%), elevated liver enzymes, reversible non-obstructive paralytic ileus. The following reactions, reported in 1.0% or less of patients, occurred under conditions where a causal relationship is uncertain: angina pectoris, atrioventricular dissociation, chest pain, claudication, myocardial infarction, palpitations, purpura (vasculitis), syncope, diarrhea, dry mouth, gastrointestinal distress, gingival hyperplasia, ecchymosis or bruising, cerebrovascular accident, confusion, equilibrium disorders, insomnia, muscle cramps, paresthesia, psychotic symptoms, shakiness, somnolence, arthralgia and rash, exanthema, hair loss, hyperkeratosis, macules, sweating, urticaria, Stevens-Johnson syndrome, erythema multiforme, blurred vision, gynecostasia, galactorrhea/hyperprolactinemia, increased urination, spotty menstruation, impotence.

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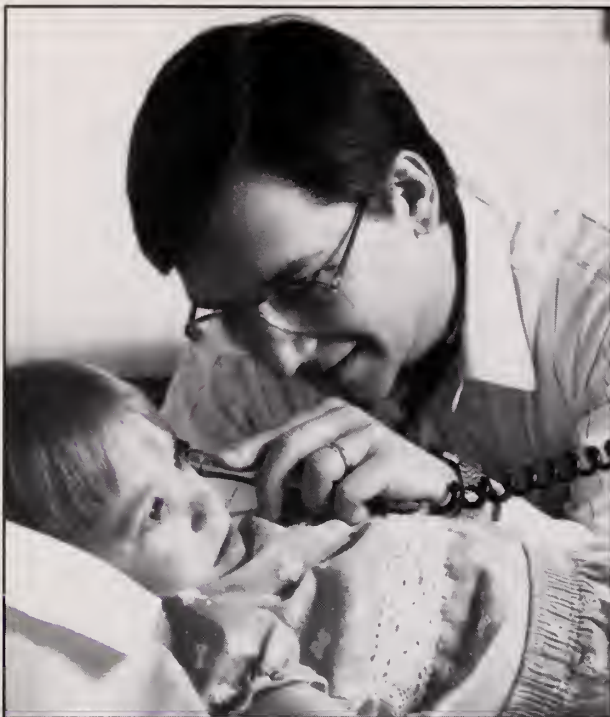
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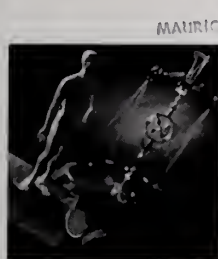


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Cover photo by Rob Levine of Minneapolis.

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In the Wake of the Health Right Act

Edmund C. Burke, M.D.

The Minnesota Health Right Act left organized medicine feeling somewhat battered in its wake. In this issue of *Minnesota Medicine*, we include a number of assessments of the law and the Minnesota Medical Association's efforts to improve it.

In a Perspectives piece this month (page 13), Miles et al. evaluate the Minnesota Medical Association's response to the health care access debate and offer constructive criticism of the MMA's approach. Although criticism can be difficult to take, there is some truth in what these authors have to say. According to the authors, the MMA was slow in realizing that Minnesota's political system had shifted its focus from "access" to "cost containment" long before the Minnesota Health Right Act was passed. One reason for physicians' lack of vision, say the authors, was poor communication on the issue.

While some of these criticisms are legitimate, the MMA cannot be all things to all members. This became especially clear during the debate surrounding the Health Right bill. As the bill sped through House and Senate committees, some of our doctors complained that the association did too little to oppose the legislation, while others criticized our opposition. The debate was frustrating, but nonetheless was a learning experience that showed us the need to pull our forces together.

The MMA is hard at work marshaling its forces now in the firm belief that physicians can be influential in shaping a better, fairer law that will do more to assure access. Just what is the MMA doing? First, we have the Task Force on the Minnesota Health Right Act that is coordinating the association's response to the new legislation. In this month's Face



"Physicians can be influential in shaping a better, fairer law that will do more to assure access."

to Face interview (page 7), we talk with Barbara Yawn, M.D., chair of the task force, about its goals and activities. The group is formulating the MMA's vision for the legislation and building coalitions with other organizations to bring about needed changes in the law.

Before we can effectively represent our members, we need to understand their views on important issues. For this reason, two-way communication is essential. At the request of Dr. Yawn and the MMA Board of Trustees, the Committee on Communications is formulating a strategy to inform the membership about the legislation, to get feedback from members, and to assist physicians in dealing with the public.

The Communications Committee suggested distributing information packets to the MMA House of Delegates last month and is also planning to make a toll-free hotline available to members for weekly updates on the Minnesota Health Right Act.

After the update, members will have the chance to leave messages about their opinions and concerns. This should allow the MMA to poll members on various topics.

Minnesota Medicine will also continue to highlight the wide-ranging provisions of the new act and will attempt to follow health care reform activities in other states, such as Oregon, Vermont, and Hawaii.

An MMA leadership conference is in the planning stage, and the Communications Department will assist in its development. The objective will be to offer tips for addressing the public and dealing with the media.

In addition, the MMA is working on an outreach program with the county medical societies and the media. The association hopes each component society will appoint one or more individuals to accept the responsibility of keeping that society informed of the latest developments.

Finally, the MMA is assessing how it can better represent you, the physician members. The association is conducting focus groups with physicians from around the state—Fergus Falls, Duluth, Mankato, and the Twin Cities—and asking for opinions on health care issues and the MMA's role. After the focus groups, the MMA will be conducting an extensive survey to further assess your opinions—a process that may be repeated annually.

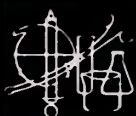
Minnesota's health care reform act will continue to challenge our abilities as an organization, but the early results are promising. We are thinking strategically about the future, and the long-term result will undoubtedly be a stronger association.

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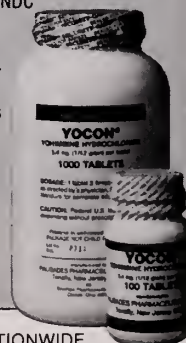
Dosage and Administration: Experimental dosage reported in treatment of erectile impotence.^{1,3,4} 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to 1/2 tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.³

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References:

1. A. Morales et al., New England Journal of Medicine: 1221, November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

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MMA's Vision for 'Health Right'

Task Force Prepares Strategy

Minnesota Medicine interviews Barbara P. Yawn, M.D., M.S.

The Minnesota Health Right Act is changing the face of health care in Minnesota, and as a result, is creating new responsibilities and objectives for the Minnesota Medical Association. To help facilitate the organization's response to the law, the MMA's Executive Committee created the Task Force on the Minnesota Health Right Act shortly after the 1992 legislative session and asked Barbara Yawn, M.D., MMA vice president and coordinator of clinical research at the Olmsted Medical Group in Rochester, to chair it.

The task force's role is, among other things, to deal with the issues involved in implementing the law, to analyze its initial implementation and long-term effects, to facilitate coordination of related activities, and to make recommendations to the Board of Trustees for future activity. The task force has accomplished a great deal in a short time. It began its work by nominating MMA physicians to the Minnesota Health Care Commission and to the various committees created by the new law, and several of the physicians the task force recommended have been chosen to fill various positions (see sidebar, page 9). It has also facilitated an analysis of several articles of the law and has prepared a document that recommends actions in each area. In the following interview, Dr. Yawn further discusses the goals and accomplishments of the Task Force on the Minnesota Health Right Act.

Before joining the Olmsted Medical Group in January 1992, Dr. Yawn was a rural family physician in Worthington, Minnesota, for 12 years. She is also editor of *The Country Doctor* and is a member of the Minnesota Medicine Advisory Committee and the MMA's Strategic Planning Task Force. In addition, she serves as the governor's appointee to the Children's Trust Fund Board and congressional appointee to the Physician Payment Review Commission's Research Advisory Board to study the impact of the resource-based relative value scale.

Dr. Yawn is optimistic that physicians will, through compromise, improve Minnesota's new health reform law.

Minnesota Medicine: Dr. Yawn, you wear many hats, but currently, we're interested in learning more about the Task Force on the Minnesota Health Right Act, which you chair. What is that task force and what is your role?



Barbara P. Yawn, M.D.

"Every physician can make a difference in the future of health care reform."

Yawn: The Task Force on the Minnesota Health Right Act is charged with coordinating the MMA's response to the health care reform legislation that passed this spring. It will also facilitate future MMA reform initiatives.

Minnesota Medicine: Does this mean the task force has taken responsibility for analyzing the new health care reform law and making recommendations for action?

Yawn: Not exactly. MMA's standard committee approach has been effective in dealing with many health care concerns, but our approach is somewhat different because we have asked numerous existing MMA committees to study certain aspects of the legislation and report back to us. We hope to integrate all of MMA's resources to assess where current legislative and public policy stands and to identify areas where we can help shape the future of those policies. This type of proactive approach has also required our working with groups outside the MMA.

Cooperative Efforts

Minnesota Medicine: Can you be more specific about how MMA can work with other groups to shape—or reshape—health care reform in Minnesota?

Yawn: Let me give you an example. Minnesota's new health care reform act is like a rough sketch of a building. So far, about all we know is that it is large, expensive, and has several rooms—cost containment, data collection, technology assessment, insurance reform, practice parameters, and rural family practice residencies are just a few of them. As an association, we can help design those rooms—their purpose, their size, and how they connect with other rooms—but we will not be able to do this alone. Because it is a large, expensive, public building,

many other people want to be part of the design process. They don't have our medical expertise, but we don't have their expertise as consumers, administrators, or health planners. Together, we can build a structure that may be different from any individual vision. We can build a health care plan that functions effectively for each group as well as the combination of groups. The task force is compiling the MMA's vision of the building and assessing the Legislature's building codes. Some requirements we strongly support. Increased access for the uninsured, for example, is a fundamental element of reform, and we will try to develop ways to increase access for the uninsured who are not covered by the state's new insurance program (see "Will Minnesota's Health Care Reform Act Assure Fair Access?" page 17). Uniform billing forms could decrease overhead costs, and we will try to speed up the development of the standardized form.

Conversely, we believe many provisions of the new law need thorough evaluation to determine their efficacy—practice parameters, mandatory managed care, designated centers of excellence, and financial data collection, for example. Other sections need to be modified; we believe we need to strengthen the requirements for small employers to provide health insurance, and we need to find a way to disperse the financial responsibility of the plan to the general public.

Minnesota Medicine: You said the Task Force on the Minnesota Health Right Act is developing a plan to guide the MMA's future actions in health care reform. What is the task force's action plan, and how was it developed?

Yawn: During the summer, the task force asked several MMA committees to review sections of the law in detail and to identify areas that need physician input in design, implementation, or change. The Committee on Medical Practice and Planning evaluated Articles 2, 3, and 4 of the new law, which deal with insurance reform; the Rural Health Task Force considered articles 5 and 6 related to rural health; the Committee on Legislation reviewed articles 9 and 10 on financing and appropriations; the Ad Hoc Committee on Quality Assessment and Data Utilization analyzed article 8 on data collection; the Committee on Professional Liability dealt with article 7 regarding malpractice; and the Task Force on the Minnesota Health Right Act covered article 1, the cost containment and committee development section. From the information gathered, the task force developed a document that restates the MMA principles dealing with each issue and recommends actions under each one. For example, we agree that providers should guide the regional coordinating boards, which consist primarily of public members. The task force recommends that the MMA use contacts in the county medical societies, staff liaisons to component societies, and the hospital medical staff section to facilitate these regional efforts. The task force also recom-

mends that the MMA develop and provide training for physicians who participate on any committee or commission related to the new law. Those physicians will be trained in group process, in working with and educating public members, in building coalitions, and in obtaining facts and background data pertinent to the committee's charge.

The MMA believes that providing access to health care is a broad societal responsibility and, therefore, should be the financial responsibility of all society, not just providers or the sick. The task force will be working with other groups who agree with this position to consider modification of the law's revenue base.

A Proactive Approach

Minnesota Medicine: Can you tell us why you describe these efforts as proactive rather than reactive?

Yawn: In my opinion, the only difference between proactive and reactive is the timing. The earlier a problem is recognized and assessed, the less likely someone else will have developed a solution. If someone else has already developed and publicized a solution, our response is

reactive. To be proactive, we are taking the problems and outlines of solutions identified in the new law and developing strategies that modify and improve upon the recommendations. We are responding in the formative stages instead of reacting to a completely designed and implemented plan. For example, the new law calls for a plan to reduce the rate of increase in health care costs. The MMA could wait for the commissioner of health and the regional coordinating boards to formulate

plans, but instead it is beginning to develop a plan of its own and is participating with the other groups as they design their plans.

Physicians' Role in Reform

Minnesota Medicine: Can physicians really expect to make any difference?

Yawn: We already have. The Minnesota Health Right Act did not come out of the blue; all of us know that. However, the provisions of the legislation are very complex, and the bill and its exact language became public knowledge overnight. Instead of having time to carefully consider the potential ramifications of the law, as we are doing now, we had to react immediately, with very little time for analysis. The MMA did have some important documents already drafted, such as the report of our Medical Benefits Task Force and the white paper defining our principles for health care reform, which were very useful. Unfortunately, the seemingly conspiratorial nature of Health Right's creation, the quick call for a stand from the medical profession, and the rapid push of the legislation through committees left health

“The Minnesota
Health Right Act did
not come out of the
blue; all of us know
that.”

The Minnesota Health Right Act

An Update

Program To Get New Name

The Legislative Oversight Committee for the Minnesota Health Right Act, in conjunction with the state's health care departments, will be choosing a new name for the state program created by the new law. Minnesota State Fair-goers were given a chance to brainstorm and nominate their own creative ideas, which the committee is using to come up with a tag for the program.

Because "Healthright" is the federally registered trademark of a California-based company, the state originally changed the plan's name to MinnesotaCare. However, the Legislative Oversight Commission protested the name, saying it sounded too much like a welfare program. They gave the plan an interim name, "Children's Health Plan Plus," and planned the State Fair contest to find a permanent name. The legislation is still called the Minnesota Health Right Act.

MMA Physicians Named to Commission, Committees

The Minnesota Medical Association appointed Jasper R. Daube, M.D., to the MMA slot on the Minnesota Health Care Commission and Andrew J. K. Smith, M.D., as alternate. Daube, a neurologist at the Mayo Clinic, has served on the MMA Committee on Legislation since 1989. Smith, a Minneapolis neurosurgeon, is chair of the MMA Board of Trustees.

At the recommendation of the MMA, the governor appointed Robert T. Kelly, M.D., to the rural physician position on the Health Care Access Commission. Kelly, who has been in family practice in Grand Rapids since 1952, was a member of the National Advisory Committee on Rural Health from 1988 to 1991.

The MMA has submitted recommendations for appointees to committees, and the governor and the commissioner of health have begun making final appointments.

At the recommendation of the MMA, Anthony Jaspers, M.D., was named to the rural physician position on the Rural Health Advisory Committee. He specializes in family practice in Lake Crystal and represents the Southwest District on the MMA Board of Trustees. Also at the MMA's recommendation, Ronald Franks, M.D., was selected as the higher learning representative to the committee. Franks is a psychiatrist and dean of the University of Minnesota-Duluth School of Medicine.

The Minnesota Health Care Commission Subcom-

mittee named nine physicians, including three MMA nominees, to the Health Planning Advisory Committee. John Abenstein, M.D., M.S.E.E., who specializes in cardiovascular anesthesiology at the Mayo Clinic in Rochester, and F. Blanton Bessinger, M.D., who specializes in pediatric cardiology at Children's Hospital in St. Paul, both MMA nominees, were chosen for the urban physician positions, and Richard Schroeder, M.D., an obstetrician/gynecologist at Affiliated Medical Centers in Willmar, also an MMA nominee, was chosen for the rural physician position.

The following MMA members were also chosen for the committee; Delwin Ohrt, M.D., vice president and medical director of Blue Cross and Blue Shield of Minnesota, as the representative on rural health plans; Carolyn McKay, M.D., commissioner of health for the city of Minneapolis, as representative on wellness and disease prevention; Steven Miles, M.D., Center for Biomedical Ethics at the University of Minnesota, representative on biomedical ethics; and John Burns, M.D., vice president of health management at Honeywell, Inc., who fills one of the employer positions. Other physicians on the committee are Robert Hauser, M.D., president and chief executive officer of Cardiac Pacemakers, Inc., as the representative on urban health care technology, and George Isham, M.D., medical director of MedCenters Health Plan, representative on urban health plans.

MMA Comments on Emergency Rules

The MMA and the Minnesota Hospital Association submitted comments to the Department of Human Services on the proposed emergency rules governing the administration of the state's new health care plan created by the Minnesota Health Right Act and asked for clarification of the rules regarding copays.

According to draft rules, providers are responsible for collecting a copayment on certain services from the new health plan's enrollees, and the providers must deduct that amount from the allowed reimbursement rate submitted to DHS. The joint letter asked what procedure DHS would follow if the patient refused to pay. DHS has indicated that it will not reimburse providers at the full MA rate if they do not collect the copayment.

DHS will probably follow an MMA/MHA suggestion that the plan's information numbers be printed prominently on all the plan's materials so that inquiries will be directed to the appropriate government agency rather than to physician offices.

continued

Regional Coordinating Boards Established

The Minnesota Health Care Commission drew boundaries for six regional coordinating boards at its first meeting August 5. The 17-member boards will address antitrust problems and make recommendations to the Minnesota Health Care Commission about their regions' health care needs. The MMA will appoint one physician to each board.

Act Raises Legal Questions

If the cooperative arrangements called for by the Minnesota Health Right Act are to be exempt from antitrust laws, the state must provide "active supervision." According to Thomas Pursell, deputy attorney general, "a federal court may not find immunity unless the agency has and exercises the power over the specific arrangement in question" (see "Minnesota's Health Care Reform Act: Will the New Law Founder on Antitrust Fears?" page 35).

MMA legal counsel Mary Prentnieks advises that a recent court ruling may make it more difficult for Minnesota to collect the 2 percent provider tax from out-of-state providers. In May, the U.S. Supreme Court decided in *Quill v. North Dakota* that the state couldn't require an out-of-state mail order company to collect and pay a use tax on goods purchased for use in the state. The court reasoned that the tax on interstate commerce was overly burdensome, and there wasn't enough of a link with the state to justify it.

On June 9, the Minnesota Court of Appeals struck down a state law that limits benefits to welfare recipients who have lived in Minnesota less than six months. The court held that the statute is unconstitutional and interferes with a person's fundamental right to travel. The new health plan requires that a person live in Minnesota for six months before qualifying for the program. It is not clear whether the health plan created by the Minnesota Health Right Act will be viewed as a subsidized welfare program.

Local Group Challenges Funding Source

Twin City Pipe Trades Welfare Trust, a self-insured health care plan, filed suit September 2 against the Minnesota commissioners of health, human services, revenue, and the administrator of the state plan created by the Minnesota Health Right Act. The suit challenges the 2 percent tax on gross revenues for hospitals and other health care providers, which could be passed on to the trust as a third-party payer. Bill Cumming of Lindquist & Venum, the trust's attorney, said the tax creates conflict between federal and state laws. Under the Taft-Hartley Trust Act, also known as the Labor-Management Relations Act, it is illegal for assets from self-insured employee benefit plans to be used for any purpose other than employee benefits, and violations are a felony. The law could potentially cost the trust more than \$300,000 annually.

care professionals, the MMA, and the public little time for careful contemplation on either side of the debate. And, as always, anyone who is on the pro side of an issue is required to do little, if any, explaining of weaknesses or shortcomings. Those of us who had concerns about the adequacy of the proposed law had all the explaining to do.

Minnesota Medicine: What's next? Can physicians influence the future of health care reform in Minnesota—or is it too late?

Yawn: Every physician can make a difference in the future of health care reform in Minnesota. Some will be on the front lines working with other groups researching and testing new cures and treatments. Most of us will be in the trenches working with our own communities. We need to keep up-to-date on the developments, and we need to share our perspectives with our colleagues, the public, and our area legislators.

We need to reassess our public image. I believe physicians are currently viewed with the same suspicion and lack of respect as our business-leader colleagues (see "Minnesota Physicians and Health Care Reform: After 'Health Right,' " page 13). How are we different from the average CEOs, managers, and other top-level professional people in our communities who also work long hours and need to study and read to keep abreast of industry changes? The public may believe there is no difference—we all do our jobs and are well paid for it. Community service and individual dedication can get lost with all the regulations, third-party payers, and litigation.

What can we do? We can get back to the reasons we all became physicians—to improve the health of the public, not to earn a big salary and to be placed on a pedestal. We can become a visible part of the community again by talking to the media, to community groups, to legislators, and to our patients about health issues—not just those that are misconstrued to be pocketbook issues. We still have lots of time to make a sincere, positive impact.

Minnesota Medicine: Many physicians are still angry and frustrated about the health care reform package that became law last spring. How can those doctors channel their anger constructively?

Yawn: I feel very fortunate; while the work of the Task Force on the Minnesota Health Right Act is time consuming, it is an excellent outlet for my frustrations, anger, and energy. Like all physicians, I want to make a difference. As chair of the task force, my course may be more clearly defined than others', but every single physician can make a difference.

To have any impact on the future of health care reform, physicians will have to interact with legislators, the public, and other health care professionals—including physicians—with different views. We need to be viewed as flexible and willing to admit that while our health care system is the best in the world, it needs to evolve like every other service profession in America. We

need to find topics that capture the media's interest. For example, the volunteer Rural Access Clinic in Cromwell, Minnesota, has gotten their attention. The media like it and have offered physician participants a forum for discussing a broad range of topics regarding care of the uninsured. This media coverage is beneficial to us because it describes a community service provided by physicians while presenting a more realistic view of who and what physicians are.

Anger, defensiveness, and inflexibility on either side of the health care reform debate will make change and compromise unlikely, if not impossible. We need to use the same skills in this arena that we use in working with our patients: listen, diagnose, educate, recommend a plan of action, and if it doesn't work, reassess and negotiate.

Minnesota Medicine: You seem more optimistic than many physicians.

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Minnesota Physicians and Health Care Reform

After 'Health Right'

Steven H. Miles, M.D., David Haugen, M.A., and
Nicole Lurie, M.D., M.S.P.H.

The events surrounding passage of the Minnesota Health Right Act illustrate the benefits and pitfalls of physician participation in health care reform. Physician lobbying changed parts of the law, demonstrated the powerful yet limited influence of physicians, and led some legislators and members of the media to criticize physicians. It is vitally important that Minnesota physicians come away from this experience better equipped to constructively participate in the kind of major reform required by this new law.

There are many signs that the United States is at a political flash point in the debate about health care reform. As *JAMA* editor George Lundberg stated, major change has an "aura of inevitability."¹ Three-fourths of citizens, business leaders, labor leaders, and politicians agree that fundamental reform of the health care system is needed.² Americans' dissatisfaction with their health care system is substantially higher than in other developed nations.³ Health care reform is powerfully influencing state and national political campaigns, such as Harris Wofford's upset victory over former governor and U.S. Attorney General Richard Thornburgh in Pennsylvania's 1991 Senate election.^{1,4,5} Comprehensive reforms in Vermont, Oregon, and Minnesota, and bills promoting federal single-payer proposals or pay-or-play plans (which, only five years ago, would have been immediately dismissed) now command center stage. The debate over the Minnesota Health Right Act is just a harbinger of reform debates to come.

Physicians should play a leadership role in these debates and in the reform itself. How physicians understand their role and the manner in which they participate will largely determine whether they are able to lead the public interest in a better health care system or will be seen as just another special interest group. We review Minnesota's health care reform experience and consider how physicians can play a more effective role in health care reform.

A Foundation for Leading Reform

Four elements form the foundation for physician leadership in health care reform: 1) a convincing understanding of the health care crisis, 2) a credible reform proposal,

3) familiarity with emerging policy proposals and positions, and 4) participation in broad-based coalitions.

A convincing understanding

Public support for universal access to health care is based on both altruism and fear.⁶ Americans altruistically believe that everyone has a right to health care. Americans fear that our health care system is in a cost spiral that is undermining economic competitiveness, consuming resources needed for other social priorities, and endangering the middle class's access to health care. This fear touches most middle-class families. A recent AMA survey found that one-fifth of families have delayed medical care in the last 12 months because of out-of-pocket costs.⁷ Concomitantly, the public appears to have concluded that health care services offer much less value for the money than other consumer goods or services^{8,9} and that out-of-pocket health care expenses are much too high.

These views now form a powerful and durable consensus that spans the political spectrum, engages business and social program advocates, and commands the attention of the middle class. In Minnesota, this consensus translated into bipartisan political support for state health care reform legislation—from businesses, educators, advocates for children and seniors, labor groups, women's groups, and civic organizations.

To be convincing in this political climate, physician support of universal access to health care must acknowledge the central role of cost containment in securing that access. Provider claims that they should lead reform because of their expertise in "quality health care" or because of the relative cost-efficiency of Minnesota health care are unconvincing to middle-class people unable to afford care or those fearing that financial ruin would accompany an illness. To the degree that middle-class American patients or taxpayers believe that rising costs are now threatening *their own* access to health care, dire warnings about "rationing" will neither lessen interest in reform nor secure more funding for health care. To the public, the assertion by some physicians that the political system shifted its focus from "access" to "cost containment" sounded like a belated and reluctant acknowledgment of the public's central concerns.

"To lead reform,
physicians must offer
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access."

A credible proposal

To lead reform, physicians must offer practical and substantial proposals to contain costs as well as broaden access. During 1991, the Minnesota Medical Association's "top" legislative priority was increasing Medicaid reimbursement. The MMA supported expanding access by obtaining additional funding from beneficiaries, private payers, and the government¹⁰ without imposing mandatory limits on services for the poor.^{11,12} Editorials in the MMA's *Monitor* defined the root of the access problem as inadequate reimbursement, especially for care provided to Medical Assistance patients.^{11,13-16}

During the early 1991 debate of the Health Care Access Commission's bill—popularly known as H.F.2—the MMA opposed a variety of cost-containment proposals, including consolidation of state programs (which was termed a step toward a single-payer system), rationing, global budgeting, state review of medical technologies, and provider networks for workers' compensation. The MMA said that copays and deductibles should be used to contain costs, but it opposed mandatory assignment of state fee schedules.^{10,11} It supported insurance reform and subsidized insurance and, thus, supported the final health care access bill with reservations. The governor vetoed the bill, primarily because of concerns about the adequacy of its financing. An override was expected.¹⁷

Late in 1991, two years after the Health Care Access Commission convened, the MMA released general criteria for reform but never made an explicit proposal to address uncontrolled and rising costs, which the public viewed as the cause of deteriorating access to health care. Minnesota's major physician lobby was thus open to the charge that "the big loser in this session's most publicized action, the HealthRight bill, was the state's powerful medical industry... [which] came off as just another special interest intent on putting protection of their pocketbook above the public good."¹⁸ Clearly, such views, if widely held,¹⁷ would diminish physicians' credibility and weaken their leadership role in health care reform.

Other state medical associations have taken a different and more successful tack and played a major role in shaping health care reform in their states. The Vermont Medical Association, for example, supported global budgeting, and the Oregon Medical Association supported explicit rationing.

Familiarity with the policy debate

To lead health care reform, physicians must be well versed in the details of the policy debate. Many doctors complained that the Minnesota Health Right Act was concocted in haste, in secret, in ignorance of the system, and by a process that had neither solicited nor debated physicians' views. An alternative possibility is that the physician community had not kept up with the policy debate.

The process leading to Minnesota's health reform law began in 1989 with the creation of the Health Care

Access Commission, which was charged with recommending health care reform by January 1991. The commission held 19 public hearings across the state in which patients and employers forcefully described their growing dissatisfaction with the costs of obtaining health care in Minnesota. It surveyed over 10,000 households to assess citizen preferences and estimate the number of uninsured Minnesotans, and it surveyed 1,100 employers about their employee benefits and preferences. It issued multiple drafts of 15 discussion papers addressing such topics as underwriting, reinsurance, benefit design, geographic access, revenues, and implementation. It issued an interim report in February 1990 and a final report in January 1991. All of the commission's hearings, subcommittee meetings, and reports were public. It concluded that access was a major problem related to insurance practices and unaffordable costs.

The coverage of this complex, prolonged debate in the MMA's publications, *Minnesota Medicine* and the *Monitor*, was sketchy. *Minnesota Medicine*'s first feature article on the commission's work appeared in May 1990.¹⁹ In 1991, the Health Care Access Commission report and corresponding legislation was introduced, debated, passed, and vetoed. *Minnesota Medicine* presented the MMA Medical Benefits Task Force Report^{20,21} and offered only brief notes on the reform process. The January 1991 issue interviewed the commission chair²² and included a President's Letter outlining the MMA response to the commission's proposals.²³ The November 1991 *Monitor* devoted only five sentences to major policy evolutions by the HMO Council and Insurance Federation.¹² Significantly, the HMO Council proposal revealed new support for a health services tax. In March, the HealthRight bill included a provider tax and mandatory assignment in line with the HMO proposal.

With the benefit of hindsight, we propose that more effective coverage would have focused on the intense concern about medical costs in 1990 and 1991 and on the details of reform proposals throughout 1991. The MMA's publications should have discussed the tenor of the access commission's public hearings. By not addressing the public, business, and political conclusion that medical costs were too high and rising too rapidly, physicians placed themselves outside the consensus that was the base for legislation. In addition, side-by-side comparisons of the major interest-group proposals could have identified opportunities for consensus and coalition building. Debate formats presenting supporting and opposing positions on controversial proposals might have helped to develop a more informed physician constituency.

Participation in broad-based coalitions

The public wants multi-constituency leadership more than it wants to rely on physicians' expertise on quality health care.⁸ An AMA Gallup poll found that the public is wary of organized medicine's role in health care reform. Forty-two percent of those surveyed believe the AMA is doing only a "fair" or "poor" job in assuring quality medical care for all Americans.⁷ The poll also

found that the AMA is less trusted than consumer organizations, such as the American Association of Retired Persons, and is trusted about as much as business and employer groups.⁷ Two national polls of public, business, labor, and political leaders identified doctors as the "toughest barrier to reform."^{24,25}

The public is apprehensive that providers' financial interests will affect clinical decisions and policy positions. The AMA-commissioned Gallup poll found that two-thirds of Americans believe doctors "are too interested in making money."⁷ In Minnesota, this sentiment was conveyed in snide references to doctors' incomes (on average, four times the mean working wage²⁶), which often prefaced media coverage of physician lobbying on HealthRight. Nationally, physicians' appeals to allow the profession to set its own ethical standards on financial conflicts of interest²⁷ have not prevented the creation of laws that preclude the dumping of emergently ill indigent patients and outlaw physician ownership of referral facilities.

Because of this public skepticism about physicians' motivations, credible political leadership requires that physicians create and participate in alliances with groups both inside and outside the health care system. The breadth of such alliances suggests a public, rather than a special, interest. Such alliances as the Minnesotans for Affordable Health Care (various progressive and social concern groups both inside and outside the health care system) or the former Minnesota Coalition on Health (business and insurance groups) were attractive to the media and influential during the HealthRight debate last spring.

Americans' trust in their own doctors is centered on the physician's clinical expertise and counseling. The difficulty of using physician-patient trust on behalf of a political position was revealed by the reaction to an attempt by physicians to solicit patients' signatures on anti-HealthRight petitions during clinic visits or hospital stays.²⁹ The petition presented the MMA's view of the reform proposal without providing a balancing perspective. There was no precedent for clinic petitions on policy matters for which doctors' financial interests were so clearly affected. Thus, some doctors, legislators, and patients felt that this signature drive unfairly manipulated physician-patient trust, and the media portrayed such actions as coercive of patients.²⁹

Physicians should build bridges to non-medical public interest groups. By lobbying mainly from within the health care industry—organized medicine's approach during the 1992 legislative session—physicians' major lobby sacrificed potential credibility. Calls for a consolidated physician position²⁸ are neither healthy nor possible. Recently, a political action committee for physicians, HealthPAC, was formed with the objective of overturning parts of Minnesota's health care access

law that are unfavorable to doctors, rather than supporting those aspects of the law that improve access to care. This will likely reinforce the public's perception of physician insularity.¹⁷

Reform and Physicians: What Now?

Physicians can play an influential role in health care reform. The debate over the state's new health care reform law suggests that Minnesota is much like the rest of the United States with regard to the intensity of interest in reform and the political dynamics of physician participation in that process. To lead, physicians must advance reform proposals that expand access and explicitly address the public's fear of already high and rising

health care costs. They must stay informed of the evolving details and conversant with the constituencies of major reform proposals. They must be sensitive to public ambivalence about physicians' economic interests in the present unacceptably costly and inflationary health care system. They can address that ambivalence by collaborating with reform groups that do not represent health care providers.

The public wants doctors in this debate because it wants quality health care. Physicians' clinical and clinical-administrative skills are integral to effective health care reform. Beyond these abilities, physicians offer a special

understanding of the human condition and often a unique set of interpersonal skills that also must be at the core of a health care system with a heart. Successful physician participation in health care reform is possible and necessary if we are to attend to the public's fears as well as its aspirations. MMA

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REFERENCES

1. Lundberg GD. National health care reform: the aura of inevitability intensifies. *JAMA* 1992;267:2521-4.

continued

2. Iglehart JK. Opinion polls on health care. *N Engl J Med* 1984;310:1616-20.
3. Blendon RJ, Leitman R, Morrison I, Donelan K. Satisfaction with health systems in ten nations. *Health Aff* 1990;9:185-92.
4. Tokarski C. Wofford-Thornburgh: a turning point for health reform. *J Am Health Policy* 1992;2:17-20.
5. Blendon RJ, Szalay US, Altman DE, Chervinsky G. The 1991 Pennsylvania senate race and national health insurance. *J Am Health Policy* 1992;2:21-4.
6. Blendon RJ, Edwards JN, Hyams AL. Making the critical choices. *JAMA* 1992;267:2509-20.
7. Harvey LK. AMA survey of public opinion on health care issues. American Medical Association, 1991.
8. Louis Harris and Associates. Making difficult health care decisions. Volume 1, The national survey (how health plans should choose between different expensive technologies: a survey conducted for the LORAN Commission), 1987.
9. Taylor H, Leitman R. Consumers' satisfaction with their health care. In: Blendon RJ, Edwards JN, eds. *System in crisis: the case for health care reform*. Washington, DC: Faulker and Gray Healthcare Information Center, 1991:75-102.
10. MMA adopts policy on universal access. *Monitor* 1991;10(15):6-7.
11. Health care access bills are a top MMA priority. *Monitor* 1991;10(4):1-3.
12. Smith AJK. MMA seeks members' input on health care for uninsured. *Monitor* 1991;10(14):2.
13. Smith AJK. Viewpoint. *Monitor* 1991;10(4):2.
14. Smith AJK. State shortfall may affect access to health care. *Monitor* 1991;10(1):2.
15. Preview of legislative issues. *Monitor* 1991;10(2):1.
16. MMA reacts to proposed budget. *Monitor* 1991;10(5):1.
17. Johnson Consulting Services. Health Right Situation Analysis. St. Paul, Minnesota: Council of Hospital Corporations, 6 July 1992. Unpublished report.
18. Spano W, Leary DJ. Winners and losers in HealthRight. *Politics in Minnesota* 1992;10(17):1-2.
19. Meyer H. With liberty and justice for all: Minnesota's quest for guaranteed affordable health insurance. *Minn Med* 1990;73(5):27-33.
20. What is basic medical care? Medical Benefits Task Force Report. *Minn Med* 1991;74(3):25-33.
21. Hart JF, Miles SH. Basic benefits and the hope for rational rationing. *Minn Med* 1991;74(1):11-13.
22. At the center of health care access reform. *Minn Med* 1991;74(1):7-10.
23. Tompkins RB. MMA responds to access commission proposals. *Minn Med* 1991;74(1):37.
24. Taylor H, Leitman R. Key interest groups and the future of health care reform. In: Blendon RJ, Edwards JN, eds. *System in crisis: the case for health care reform*. Washington, DC: Faulker and Gray Healthcare Information Center, 1991:209-41.
25. Henry J. Kaiser Family Foundation, the Commonwealth Fund. American's health care concerns: a national survey, 1992.
26. Sandier S. Health services utilization and physician income trends. In: *Health care systems in transition: the search for efficiency*. Paris: Organisation for Economic Co-operation and Development 1990:41-56.
27. Todd JS. Must the law assure ethical behavior? *JAMA* 1992;268:98.
28. Stolee TA. Where HealthRight went wrong. *Minn Med* 1992;75(5):45.
29. Lien D. Ethicists criticize lobbying on HealthRight. St. Paul Pioneer Press 1992 April 2; Sect. B:1-5.

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Will Minnesota's Health Care Reform Act Assure Fair Access?

Reinhard Priester, J.D.

By passing the Minnesota Health Right Act,¹ Minnesota joins Hawaii and Oregon at the forefront of states with comprehensive health reform initiatives. This landmark legislation is intended to control health care costs, reform the private insurance market, reduce inefficiencies in the health care system, and expand access to care. The law builds on several years' efforts to restructure Minnesota's health care system, beginning in earnest with the Children's Health Plan in 1987. This was followed by the failed HealthSpan bill in 1989. HealthSpan gave rise to the Minnesota Health Care Access Commission, whose final report,² in turn, laid the groundwork for the vetoed 1991 health care access bill (H.F.2).³

Throughout, assuring universal access has been the overarching goal.* The health care reform law passed last spring reflects Minnesotans' strong belief in the need to remedy inadequate access to care and is a significant step toward universal access. But the law cannot achieve this goal. Moreover, without significant changes in future years, the law will also fail to achieve other elements of fair access—the preeminent value on which Minnesota's health care system should be based.

Inadequate Access in Minnesota

According to the Health Care Access Commission, inadequate access to health care is a problem for Minnesotans who are uninsured or underinsured and for those who delay or forgo care because of cost. An estimated 370,000 Minnesotans (8.6 percent of the population) are uninsured at least one month during a 12-month period; more than 280,000 (6.5 percent) are uninsured at any given point in time. In addition, 366,000 privately insured Minnesotans (8.6 percent) have high deductibles or stringent underwriting policies that "can result in policy denials, cancellations, or preexisting-condition exclusions."²

Uninsured people are among the state's most economically and politically vulnerable citizens. Most are

poor or near-poor; nearly three-fourths are in families with incomes below twice the poverty level. Most uninsured adults are employed, although many work only part time. Only one-fourth of Minnesota firms provide health benefits to part-time employees.³ Compared with those who have adequate insurance, uninsured people are less likely to have a regular source of care, to see a physician in any given year, to obtain immunizations, and to receive adequate prenatal care.⁴ They are also more likely to delay obtaining needed services, which often compounds problems and raises costs. In 1990, more than 28 percent of uninsured Minnesotans reported that they delayed seeking care, and 70 percent of them for a serious or very serious problem. Ultimately, many uninsured people forgo needed medical services altogether.

Fair Access—Four Critical Elements

Minnesota's health care system should assure fair access,⁵ a value that has four critical elements.

Universal access to adequate care

First, access should be universal. Health care meets basic human needs, as do food, clothing, housing, and education. Without health care, one's potential for participating in the "array of life plans"⁶ that are reasonable to pursue within a given society (e.g., various education or career paths) is seriously impeded. In Norman Daniels' words, an individual's range of opportunities "is reduced when disease or disability impairs normal functioning. Since we have social obligations to protect equal opportunity, we also have obligations to provide access, without financial or discriminatory barriers, to services that adequately protect and restore normal functioning."⁷

The requirement of universality, however, does not mean that everyone should have access to all potentially beneficial care. Health care resources are scarce relative to needs; no society can afford to provide every service to everyone. The appetite for health care is infinitely expandable, since it is almost always possible to secure some small benefit by additional treatment.⁸ In the context of scarcity, everyone should have access to a level of health care "that would permit [him or her] to achieve sufficient welfare, opportunity, information, and evidence of interpersonal concern to facilitate a reasonably

"Minnesota's new law falls short of achieving fair access."

*The commission's charge, for example, was to "develop and recommend to the legislature a plan to provide access to health care for all state residents." Minn. Stat. 62J.01, subd. 3.

full and satisfying life."⁹ Defining fair access as universal access to an adequate level of health care is the only way to avoid an impossible commitment of resources and to assure at least *some* help to everyone.

Uniform application of care

Second, the adequate level should apply equally to everyone, and it should function as a floor, not a ceiling. Clearly, there is a level of services below which a system would be ethically unacceptable, even if everyone would have access.¹⁰ Nonetheless, it is acceptable to have some people receive a very high level of care while others receive less, if the lower level of care covers everything that is considered adequate.¹¹ Also, public policy should only define the adequate level, and permit—but not define—the higher level.¹² Services not included in the adequate level would be available for purchase in the health care market. Thus, individuals (as well as employers and other group purchasers) would be free to “buy up” from the adequate level of care and, thereby, obtain additional health care coverage or services. Despite widespread support for the concept of an adequate level of care and various efforts to define it,[†] there is no consensus regarding precisely what it should include.

Removal of barriers to care

Third, fair access requires everyone to have the financial means to obtain care, i.e., universal insurance coverage. This would be achieved by expanding public or private health insurance, or some combination of the two, to everyone. Universal insurance coverage would make it easier for minorities, legal immigrants, illegal aliens, and other underserved people to obtain care, but it would not necessarily result in fair access. Language handicaps, cultural and geographic barriers, and unfamiliarity with and distrust of the health care system would continue to inhibit access. These nonfinancial barriers must also be overcome.¹³

Shared responsibility

Fourth, assuring fair access should be the shared responsibility of individuals, private businesses, organizations, and especially the government. Individuals and the private sector should be involved in enhancing access, but the ultimate responsibility should rest with the govern-

ment; unless it assumes overall authority, the health care needs of many Minnesotans (e.g., unemployed people) will remain unmet.[‡]

Minnesota's Health Reform Law—Where it Succeeds, Where it Fails

Minnesota's new health care reform law does not meet the four critical elements of assuring fair access. The law 1) only tentatively advances universal access to an adequate level of care, 2) undermines the uniform application of the adequate level, 3) promotes elimination of nonfinancial barriers but does not remove them, and 4) does not recognize a shared responsibility.

Universal access to adequate care not provided

Minnesota's new health reform law seeks to assure that more Minnesotans have access to health care in three primary ways: it requires insurers to offer more affordable plans to small employers (two to 29 employees); it establishes a state “buying pool” to give employers more purchasing power; and it subsidizes insurance for people who can't afford it. These three initiatives, however, will not assure *universal* access to an adequate level of care.

The small-employer reforms do reduce some barriers to care. They eliminate preexisting-condition exclusions, prohibit the use of gender in insurance rating, limit premium variations based on factors such as age and claims experience, and address other insurance business practices that the Health Care Access Commission termed “discriminatory.” The major flaw is that the new law uses a voluntary approach: Although it mandates insurers to make health plans “available” to small employers, it does not require small employers to offer health care coverage to their employees. Instead, it merely encourages them to offer coverage by making it more affordable, since the Health Care Access Commission found the high cost of health insurance to be the primary reason Minnesota employers do not offer health care benefits. However, the law is unlikely to persuade many more employers to begin offering health insurance coverage.

A recent study shows that a voluntary approach does not appreciably increase the number of employers offering health insurance. In a pilot study in New York, state subsidies reduced the price of health insurance by 50 percent, but the proportion of small employers offering insurance increased by only 3.5 percent. The researchers conclude that even under the best-case scenario, more than 80 percent of small firms would “not offer their workers health insurance even with subsidies as large as 50 percent to 75 percent of the premium.”¹⁴ The Robert Wood Johnson Foundation's Health Care for the Uninsured program reported similar findings. Fewer than 25

“The law should
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everyone.”

†See, for example, the definition in: What is basic medical care? Medical Benefits Task Force Report. Minn Med 1991; 74(3):25-33.

‡Some argue that only the federal government can assume this responsibility. See, for example, “Securing Access to Health Care,” reference 9.

percent of eligible employers have chosen to buy insurance policies at premiums ranging from 9 percent to 60 percent below market rates.

Similarly, the law's state-administered buying pool for employers will not significantly increase the number offering insurance coverage. Unlike the "small-employer plans," coverage provided through the pool must include "at least the benefits required" of state-regulated health plans—including all state-mandated benefits. Cost reductions to employers will, therefore, come only from the efficiencies of purchasing coverage through a larger group, not from the lower cost of a reduced benefits package. It is unclear whether this will reduce the cost enough to encourage many employers to participate in the buying pool. (The Minnesota Department of Employee Relations, which will administer the buying pool, anticipates that the pool will be most enticing to employers already offering coverage.)

For many—but not all—uninsured Minnesotans who are unemployed or whose employers do not offer coverage, the new law provides the opportunity to enroll in a subsidized benefits plan (hereafter the "subsidized plan"), an expansion of the existing Children's Health Plan. But participation is voluntary and eligibility is restricted. The subsidized plan, which will be phased in over the next three years, will be open only to uninsured Minnesotans earning less than 275 percent of the federal poverty level. To further limit enrollment and to discourage employers from dropping workplace insurance, the law requires Minnesotans to be uninsured for four months and to be without employer insurance for 18 months before becoming eligible for the subsidized plan. A 180-day residency requirement is designed to restrict people coming to the state "for the primary purpose of obtaining medical coverage or treatment." These eligibility restrictions reduced the estimated enrollment to about 158,000 and the cost to about \$250 million at full implementation in 1997. Thus, only about 24 percent of the state's uninsured people are expected to enroll in the subsidized plan.¹⁵

The new health reform law also does not assure universal access to an *adequate* level of care. The new subsidized plan's level of benefits raises concern that important needs may not be met. Mental health and chemical dependency coverage is extremely limited (e.g., 10 hours of outpatient chemical dependency treatment per year). Hospital inpatient coverage for adult enrollees (which begins July 1993) will be limited to \$10,000 annually. In 1990 in the Twin Cities metro area, more than 10 percent of uninsured hospital patients had charges above \$10,000. These patients incurred nearly 50 percent of total charges for uninsured patients.¹⁶ The assumption is that people exceeding the \$10,000 limit would—after they spend their assets—become eligible for Medicaid or receive charity care. Yet these two

options exist now, when many health care needs are not met.

Levels of care are variable

Minnesota's health care reform law will not uniformly apply the state-defined adequate level of care. In fact, the Minnesota Legislature will now define five distinct levels of benefits for different populations. But it is inappropriate for government to define two or more disparate levels of benefits for different members of society. Once it defines an adequate level of services, that level should

apply as a minimum to everyone. It should be available to all uninsured people, and it should define the level of benefits for Medicaid and other public programs as well as the minimum level required for all private insurance policies. Government cannot demand more coverage from the private sector than it is itself willing to provide to enrollees in its own public programs. Nor can it demand that some private plans include a richer set of benefits than other private plans.¹² This does not mean, however, that the definition of an adequate level of care, once fairly established, would remain static. The con-

tent of the adequate level must be constantly revised to incorporate changes in technology, consumer preferences, and resource availability. But the revisions, like the original specifications of an adequate level, must apply as a minimum to everyone.

With the passage of the state's health reform law, Minnesota will have five state-defined levels of benefits: 1) the state's Medicaid enrollees will continue to receive the set of benefits currently provided by this program; 2) Minnesotans with private (but not self-insured) policies will continue to receive a market-defined level of benefits, supplemented by the full array of mandated benefits required of all health plans sold in the state; 3) those whose employers participate in the new buying pool will receive coverage patterned after the comprehensive level of benefits offered through the state employee health plan; 4) enrollees in the subsidized plan will receive only a limited set of benefits; and 5) those enrolled in either of two new "small-employer plans" (which differ only in employee cost-sharing provisions) will receive less comprehensive benefits than other privately insured people. The new law exempts these small-employer plans from a number of Minnesota's mandated benefits and explicitly states that any benefit not expressly specified in the law may be excluded. This schema of diverse benefit levels inappropriately institutionalizes a government-determined, tiered health care system.

Barriers still exist

Minnesota's new law seeks to provide Minnesotans with health insurance coverage by making it more affordable, but affordability of coverage does not guarantee access

"There is a level of services below which a system would be ethically unacceptable, even if everyone would have access."

to care. Nonfinancial barriers must also be overcome. The law includes several initiatives to reduce geographic barriers, including financial assistance to "at-risk" rural hospitals, funds to help establish community health centers in rural areas, and grants for rural hospitals to recruit or retain physicians. Loan forgiveness programs are established for primary care physicians and "mid-level practitioners" (e.g., nurse practitioners, nurse-midwives) who serve in designated rural areas.

Minnesota's health care reform act includes strategies to reduce other nonfinancial barriers, as well (although their focus, too, is on rural areas). It emphasizes primary care, defined as "personal care involving a unique interaction and communication between the patient and the physician [that is] comprehensive in scope, and includes all the overall coordination of the care of the patient's health care problems, including biological, behavioral, and social problems." It asks the University of Minnesota to increase by 20 percent the number of its primary care residency program graduates and to modify its admissions process to increase the number of medical school graduates choosing careers in primary care. Given the more comprehensive, community-based training envisioned by the law, primary care physicians would be better trained to recognize and overcome cultural and other nonfinancial barriers faced by traditionally underserved rural populations.

Responsibility not shared

Minnesota's new law does not reflect a shared responsibility to assure fair access. It does not specify responsibility for the private or public sectors or for individuals. Employers are not required to offer coverage and individuals are not required to obtain coverage. Finally, the law's narrow financing—a 2 percent tax on hospitals, drug wholesalers, and health care providers—does not recognize society's collective responsibility.⁵

Prospects for Fair Access

While Minnesota's new law is a step, it is not the solution. It will provide insurance coverage for many more Minnesotans, but it falls short of achieving fair access. To continue toward a more comprehensive and equitable health care system, several aspects of the law will need to be amended. First, it should require all Minnesotans to obtain coverage. This would assure that everyone would, in fact, have insurance coverage. Such a mandate would also affirm the principle that assuring universal access to an adequate level of care is a shared responsibility. Further, the subsidized plan's eligibility requirements should be relaxed and its premium subsi-

dies increased so that it is more affordable and attractive to uninsured Minnesotans.

Second, instead of specifying alternative state-defined benefit levels, the law should adopt a single definition of an adequate level of care and then apply it equally as a floor to everyone. This minimum level should preempt all mandated benefits and should be provided through all Minnesota's health care programs. The single minimum level of care should be broadly acceptable to most Minnesotans; if not, it will too easily become an inferior product for the poor, while middle- and upper-class citizens will "buy above" the specified level. To assure acceptability, those who define the adequate level of care should be bound by the definition—even though they may use their own funds to purchase additional coverage. Otherwise, the procedure would be biased, consisting of "the 'haves' deciding what is 'important' to give to the 'have-nots.'" ¹⁰ Those who actually receive the adequate level must be involved in the process. The *opportunity* to participate is not enough; a representative cross-section of people who will, in fact, receive the adequate level must actually participate in defining it. Furthermore, the budget should not drive the definition of an adequate level of care, even though this definition will unavoidably be influenced by the resources (i.e., money) available. Instead, only after the level is defined should attention turn to how to pay for it. The content of the adequate level of care itself should not be budget dependent.

Finally, the financing should be changed to reflect society's collective responsibility for assuring fair access. A broader base, such as an income tax surcharge, would more widely and more equitably spread the financial risk of illness and injury than the current tax on hospitals, drug wholesalers, and health care providers.

The new health care reform act's sweeping initiatives simultaneously address the paramount problem of inadequate access as well as concerns over high cost and inefficiency. The law deserves and will command much attention as other states grapple with health care reform, but the law should be seen as only an incremental step. Without fundamental changes, it cannot achieve fair access, which should be the primary goal of Minnesota's health care reform efforts. MM

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REFERENCES

1. Conference Committee Report on H.F. 2800. The Minnesota HealthRight Act.
2. Minnesota Health Care Access Commission. Final report to the Legislature, 1991.
3. Chollet D. Uninsured in the United States: the nonelderly population without health insurance, 1986. Washington, DC: Employee Benefits Research Institute, 1988 Oct.
4. Robert Wood Johnson Foundation. Access to health care in the United States: results of a 1986 survey, special report no. 2. Princeton, NJ: Robert Wood Johnson Foundation, 1987.
5. Priester R. A values framework for health system reform. *Health Aff* 1992;11(1):84-107.

⁵It is safe to assume that this tax will be passed through to payers; in fact, the law explicitly permits hospitals to (temporarily) recover the tax by any means, "including increasing fees or charges." Most likely, the 2 percent tax will simply disappear into the near double-digit annual increases that have characterized providers' fees over the past decade.

6. Daniels N. Health care needs and distributive justice. *Philosophy and Public Affairs* 1981;10:146-79.
7. Daniels N. Why saying no to patients in the United States is so hard. *N Engl J Med* 1986;314:1380-3.
8. Priester R, Caplan AL. Ethics, cost containment, and the allocation of scarce resources. *Invest Radiol* 1989;24:918-26.
9. President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research. Securing access to health care: the ethical implications of differences in the availability of health services, vol. 1. Washington, DC: Government Printing Office, 1983.
10. Daniels N. Is the Oregon rationing plan fair? *JAMA* 1991;265:2232-5.
11. Eddy DM. What care is 'essential'? What services are 'basic'? *JAMA* 1991;265:782-8.
12. Priester R. Universal basic benefits pre-empt mandated benefits. *Benefits Quarterly* 1992;8(1):34-40.
13. Ginzberg E, Ostow M. Beyond universal health insurance to effective care. *JAMA* 1991;265:2559-62.
14. Thorpe KE, Hendricks A, Gernick D, et al. Reducing the number of uninsured by subsidizing employment-based health insurance: results from a pilot study. *JAMA* 1992;267:945-8.
15. Minnesota Department of Human Services, Reports and Statistics Division. Health Right enrollment and cost estimates. St. Paul, Minnesota: Minnesota Department of Human Services, 1992 April 20.
16. Council of Hospital Corporations. Unpublished data. 1992.



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The Law and AIDS:
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11:00 am

Buying and Selling
Acquisitions

TRACK B

10:00 am

Joint Enterprise:
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11:00 am

Workers' Comp:
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Minnesota Legislation: Scanning the Horizon of the '90s

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2:15 pm

Managed Care: How do
You Manage Workers'
Compensation?

3:15 pm

Employee Benefits and
Cafeteria Plans

TRACK B

1:15 pm

Who is Keeping Records?
(The National Data Bank
and Medical Record
Liability)

2:15 pm

How to Prevent Being
Sued as an Employer

3:15 pm

The Litigation Experience

4:00 pm

Cocktail Hour: Talk with Presenters and Colleagues

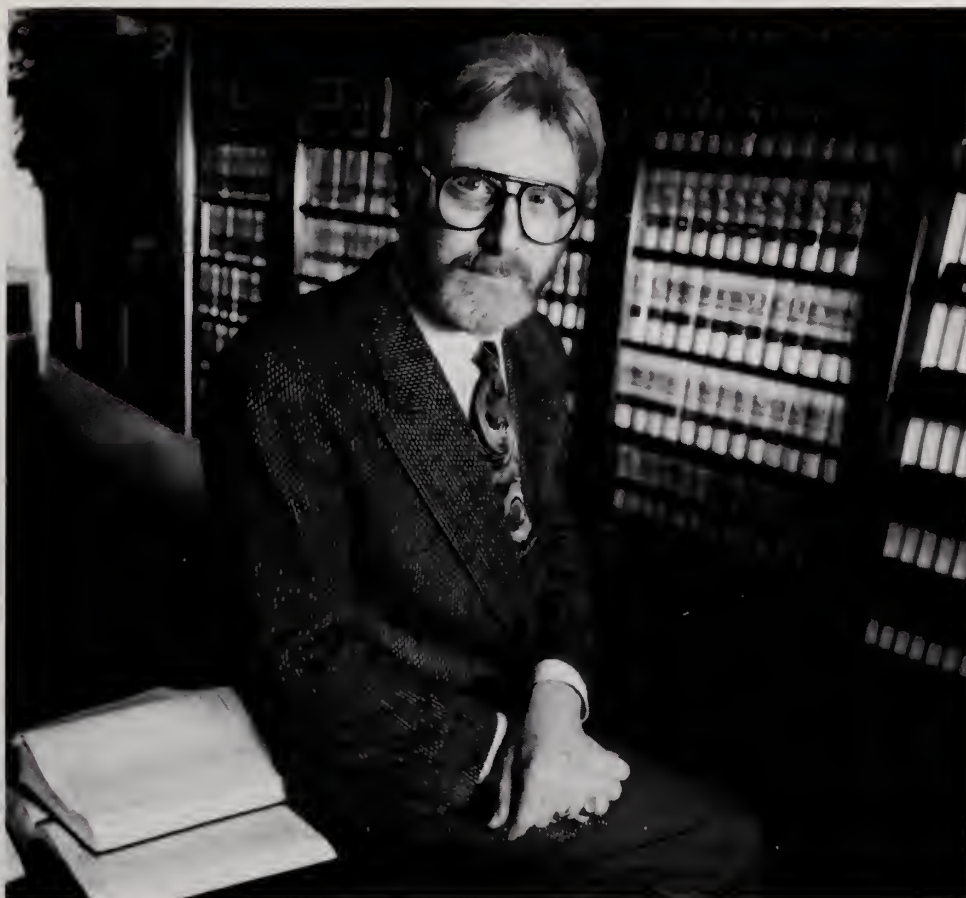
Malpractice Plaintiffs' Attorneys

The Mindset, the Methods

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Ralph C. Heussner, Jr.

Although few Minnesota physicians (fewer than 10 percent in 1991) will actually face a medical malpractice lawsuit and the large majority (85 percent) of cases are resolved in the doctor's favor, every physician is concerned about litigation. As one doctor suggests: "The possibility of having to go to court looms in everyone's subconscious." Medical malpractice affects the pocketbook viz-à-viz insurance premiums and, perhaps, standards of care. It is probably safe to say that physician attitudes toward attorneys who handle such cases from the other side of the courtroom can range from suspicion to disdain. But what are the attitudes of these attorneys toward physicians? What are their criteria for accepting a case? And what can physicians do to possibly avoid a medical malpractice lawsuit? *Minnesota Medicine* interviewed three Twin Cities medical malpractice plaintiffs' attorneys to find these answers and to try to gain a better understanding of the state of malpractice law as well as the philosophies of individuals specializing in this field.



PHOTOS BY ROB LEVINE

"I think we just see the tip of the iceberg. There's a lot more malpractice out there, and a lot more incompetent doctors."

John F. Eisberg

John F. Eisberg is considered the dean of Minnesota attorneys specializing in medical malpractice cases. The 54-year-old Kansas City, Missouri, native graduated from the University of Michigan with a degree in English literature and received his juris doctor degree from Yale Law School. He joined the firm of Robins, Davis & Lyons (now Robins, Kaplan, Miller & Ciresi) in St. Paul in 1964 and spent the first few years assisting senior partners with research and preparation of negligence and malpractice cases. He actually began trying cases in 1967 and soon began to devote his full attention to medical malpractice.

"At the time, there was only one other Minneapolis attorney specializing in medical malpractice, and he had too much of an 'attack style,'" Eisberg recalls. "I felt there was a place for someone whose approach was doctor-sensitive. I wanted to bring some class and dignity to the profession."

Today, Eisberg heads a team that includes six other lawyers, four nurse legal consultants, and two legal assistants. He is the author of "Minnesota Medical Malpractice," a 1990 book geared for trial lawyers with little or no experience in the field, and he is a frequent lecturer on malpractice law at the three Minnesota law schools.

Using a "team approach," Eisberg and his colleagues have developed an elaborate system of screening and prosecuting cases. The nurse consultants triage approx-

imately 150 calls a month (mostly from consumers who have been referred by other lawyers) during which they take a full medical history. A nurse and staff attorney then review each case to determine whether there are sufficient grounds for presentation to the group in a format similar to hospital grand rounds. Ultimately, only a handful of cases will be presented.

"The group will be able to offer some perspective, to determine if there is bias, and also to provide information on other similar cases," Eisberg says. "At this review meeting, several more cases will be ferreted out. That leaves us with only three or four cases where we will actually obtain medical records."

Of those three or four cases, half will be resolved without litigation; either the expert witness is not supportive, or the medical record does not support the claim. Thus, only a few will make their way onto the court docket.

Certain types of claims are immediately rejected, Eisberg says, citing instances where a client's obvious motivation is revenge ("a patient whose goal is to have the doctor's license revoked") or where several other lawyers have already turned down the case. "We only accept cases where we believe there is a clear case of malpractice that is supported by the medical record and expert testimony," he says. "I think we do a successful job and perform a vital service of weeding out frivolous cases. I don't think physicians appreciate this."

In addition to drawing on others' expertise and experience, the team approach provides an emotional support system. "You have to develop some emotional distance from a case in order to remain sane," Eisberg explains. "It is still difficult, especially in cases of a child's death, where you can't help from being sensitive. The fact that the group must approve a case helps you maintain your objectivity."

Understanding the Medical Science

Eisberg says he tries to maintain a general knowledge of medicine, but waits for a specific case before learning the medical principles that apply to a particular medical condition. He scans the indexes of the *New England Journal of Medicine*, the *Journal of the American Medical Association*, and a few specialty journals for articles relevant to his cases.

Asked if he wished he had a medical degree, Eisberg said: "On occasion—when it really takes me a long time to understand a case, it would help me to know in interrogations what the doctor is really saying, or if he is blowing smoke. However, with enough research, and the assistance of well-trained nurses, you can usually overcome this disadvantage. You can be taught, and I read a lot on my own."

Finding medical experts willing to testify is one of the most difficult aspects of malpractice law. Lawyers refer to the reluctance of some physicians to serve as witnesses as the "conspiracy of silence."

"It's easier to find a medical expert today than in the 1970s, but it is never easy," Eisberg says. "It can be a major undertaking." Nevertheless, he is usually able to find a qualified physician or medical scientist to give expert testimony. Eisberg credits the abilities of the nurse consultants with locating and convincing physicians to review cases and to serve as expert witnesses.

In addition to understanding the science and finding the expert, an attorney must help prepare clients emotionally. "You can never completely prepare a client for what is involved in a medical malpractice case—the drama of the courtroom," Eisberg says. "You work to prepare them emotionally for the toll it will take, but you can never totally succeed."

Advice to Physicians: Stop Stonewalling

Eisberg offered the following advice to physicians on how they might avoid malpractice lawsuits: "I'd be out of business if doctors would stop stonewalling when there's a bad outcome. Patients would not sue as frequently if there was better rapport. Instead, doctors treat it as a business. Even exceptionally competent doctors can make mistakes. Too often, afterward, they will avoid contact with the patient or family and not show any concern. They will then end up in litigation."

So what has changed in the doctor-patient relationship to spawn more lawsuits? "Specialization," answers Eisberg. "Physicians have tunnel vision into their own specialty. They have less time and show less interest in taking responsibility for the overall care of the patient. They tend to abdicate responsibility, leaving the patient

to question who is in charge—Doctor X, Y, or Z? As a result, the patient does not have any close rapport with a particular physician. You see this with HMOs and teaching institutions. Who is looking after the whole patient? Who has the overall picture?"

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Philip Pfaffly brings a somewhat different perspective to medical malpractice law. Because his firm represents many doctors, hospitals, clinics, and other businesses and insurance companies, he is counsel for the defendant in approximately half of his cases.

The 44-year-old native of eastern Iowa graduated from Drake University and Duke University Law School. He began his legal career trying insurance and product liability cases with Maun & Simon. In 1977, he joined the Minneapolis firm of Moss and Barnett. As the firm received more medical malpractice inquiries, "I was the logical person in the firm to handle them because of my background in personal injury," Pfaffly says.

The fact that he represents both plaintiffs and defendants helps him serve both better, Pfaffly says. As he explains: "Those who represent only one side over and over tend to become self-righteous or cynical. I'm a little of each."

"If I have a claim to pursue, I can anticipate what the insurance company needs to evaluate the claim. If I'm defending, I know what the other attorney is going through. Basically, the 'dual role' keeps me fresh and provides a balanced perspective in a difficult area."

Evaluating the Case

"I like to meet the client first, in person, face to face," he says. "It's important to me, if I am going to represent a client, that I feel comfortable with them, and they must feel comfortable with my style. Some clients have different goals; they're out for blood. They want to take the physician for every cent. They are not good clients."

Following the initial conference, Pfaffly will evaluate the merits of the case, first determining if there is a conflict with any potential defendant who might be represented by the firm. "If the case has promise, I will obtain and review all the medical research documentation. I will sometimes hire a nurse-researcher as an independent contractor to review the case and present a summary," he explains.

His preparation usually does not involve a comprehensive search of the medical literature. Instead, he concentrates on reviewing reports of other similar malpractice cases in publications of the American Trial Lawyers Association and relies heavily upon the advice of a retained expert. Pfaffly says he does not attempt to understand all aspects of the medical condition involved in the case.

"I have a working knowledge of medicine because of my background. In preparing for a case, I seek to have only rudimentary knowledge. I'm not an expert. I can't know as much as the doctors. However, most cases rest on two or three basic principles as to what was done," he says.



"It's hard to believe that in a 30- or 40-year career, every physician won't commit an error that could be considered malpractice. They're only human."

Philip A. Pfaffly

Pfaffly pursues litigation as a last resort. "My strategy is to try to sit down early on and communicate the patient's point of view with the doctor and his attorney. If a fact is a fact, I say, 'Let's get this resolved. It won't cost a lot of money. It won't ruin your reputation. There will be no publicity.' Unfortunately, it hardly ever works."

Pfaffly says the most frustrating aspect of medical malpractice law is handling a case for which two or three experts are willing to testify, and despite his efforts to settle out of court, the case proceeds and ends up costing hundreds of thousands of dollars, with the expected result. He concludes: "More cases should be resolved without going to litigation; it would be cheaper for the medical profession and everyone else."

The degree of difficulty in finding a physician willing to serve as an expert "depends on the specialty," Pfaffly says. "It is sometimes difficult, if not impossible, to get a local expert in some of the narrower fields, such as psychiatry, but it has loosened up; there's now more of an awareness, and doctors are willing to testify if there has been a clear act of malpractice."

Pfaffly rarely uses professional expert services. His technique for locating willing physicians begins with personal acquaintances in the medical field that he has developed through business and social contacts. "I will call and say I need help and ask if they know of anyone who might know something about this type of case," he

explains. "I wish doctors would be more willing and open about testifying as expert witnesses, even in cases where they may know the defendant. All they need to say is, 'He's a good doctor, but he goofed up.'"

Advice to Physicians: Face the Truth

Pfaffly agrees that the loss of rapport between patients and physicians has caused an increase in litigation. "It's the nature of the practice today," he says. "With specialization, there are more doctors today. When I was a kid, you had one or two doctors involved in your care, and docs still made house calls. Today, it's more of a business proposition. The patient may never meet the doctor they end up suing."

He added: "It's a vicious circle feeding upon itself. The current way of dealing with patients is to perform more tests and spend less time with patients."

Patients, as consumers, have also become more "claim conscious," Pfaffly says. "Many accept this [bringing a malpractice claim] as part of the system."

Pfaffly says many more physicians could avoid litigation by simply being candid with patients. "If there's a problem, face up to the truth. You're better off in the long run. Don't hide behind the medical record."

"But if you do become involved in a malpractice case, my advice is to hire your own lawyer for advice. Most [physicians] are willing to let the lawyer chosen by the



"Good attorneys are not out to 'get the physician.' Attorneys specializing in medical malpractice are not waiting with bated breath for a client to come by. I do not like to bring a lawsuit against a doctor."

Melvin Ogurak

insurance company handle the case. While this is usually acceptable, you may need a second opinion on some issues, like National Data Bank reporting."

The greatest challenge, says Pfaffly, is dealing with the emotional factors of a case. "The feelings are very strong. If doctors would apologize, a lot of cases would go away. Instead, the cases tend to escalate. It's a challenge to the lawyer to keep the case on a professional level. We're not trying to ruin the doctor. On the other hand, we often have to tell people that they do not have a viable claim, and some do not want to hear it."

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Minneapolis attorney Melvin Ogurak originally intended to become a physician. He left medical school after three years to take a job as a sales representative with Wyeth Laboratories. "After eight years, I became disenchanted and began looking for something else," he says. The idea of a legal career had remained in the "deep recesses" of his mind since high school, so he applied and was accepted by the University of Minnesota Law School.

Despite his science background, Ogurak says his goal during law school was not to specialize in medical malpractice law. "My primary thought was to concentrate on just getting through school—to make it through

the next test." The Minnesota native received his juris doctor degree in 1967 and began interviewing at Minneapolis firms. Impressed with Ogurak's medical knowledge ("I was at least familiar with the terminology"), a senior partner at Maegher, Geer, Markham & Anderson offered him a job, and he spent the next two years primarily doing research on medical malpractice cases.

Since 1970, Ogurak has had his own practice, which is now based in the Towle Building in downtown Minneapolis. He handles all types cases, including medical malpractice.

Accepting a Case

"The first thing, of course, is to interview the client to determine, to my satisfaction, the legitimacy of the case," Ogurak says. "I scrutinize each case very carefully. I reject 95 percent of my cases, almost on a daily basis. You can't invest the time and resources in a case unless you are reasonably certain that you have negligence, causations, and substantial damage. An attorney who accepts frivolous or nuisance type cases will soon be out of business. Therefore, you must be carefully selective in choosing which cases to litigate. In reality, there are very few."

Once assured that there is cause for a case, Ogurak proceeds by reviewing medical journals, examining the medical charts, and arranging for expert witnesses. He has an extensive medical library that includes major

How to get yourself sued for malpractice

Risk managers know that you don't have to make a medical mistake in order to get sued for malpractice. Sometimes just alienating your patients can be enough.

So, with tongue firmly planted in cheek, health care consultant James Orlikoff offers the following list of "ways to get sued for malpractice":

1. Don't greet patients warmly. Read the chart instead of saying hello.

2. Don't appear interested in patients. Avoid making eye contact.

3. Use body language that conveys superiority. If a patient is sitting down or lying on a bed, stand so you tower above him or her.

4. Don't listen. When patients are talking, interrupt frequently.

5. Don't encourage patients to talk. Ask only "closed questions," which require a limited response.

6. If you make a mistake, hide it or cover it up. If necessary, lie.

7. Don't explain anything to patients. In fact, use a tremendous amount of medical jargon.

8. Disregard patients' interest in specific information or specific treatments. If the patient asks a question, be hostile.

9. Don't treat patients with respect. Always use their first names without first asking how they want to be addressed. And be sure to make derogatory entries about patients in their medical records.

10. Don't treat patients as individuals. Treat them all the same. Better yet, treat every patient as a disease or body part.

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textbooks, ranging from orthopedic surgery to neurology. "I try to maintain just a general awareness of medical developments. I read a lot, but I must focus on the specifics in a particular case. Only after I have accepted a case will I do the extensive research."

Ogurak says there seems to be a growing willingness among doctors to testify against their colleagues, especially in serious cases in which the doctor realizes he or she is performing a public service by agreeing to testify. Like his colleagues, Ogurak seeks out local experts whenever possible. "If I can, I ask the treating doctor to be the expert. In some cases, they are willing to do so."

Direct mail letters to physicians, based on their specialty listing in the Yellow Pages, has been another successful method Ogurak has used to find individuals willing to review cases. The letter includes a few basic facts on the case. "I have been surprised at how many

physicians have responded positively to these letters," he says, adding that he will only use medical-legal expert witness services, which are advertised in trial and bar association publications, as a last resort.

Occasionally, physicians are unwilling to testify in person, says Ogurak, who describes the most frustrating aspect of his job as "the inability to put the case together the way you want," for example, when a physician has reviewed a case and found cause for malpractice, but then refuses to testify in court.

Advice to Physicians: Improve Rapport

Like Eisberg and Pfaffly, Ogurak believes the primary reason for the increased number of malpractice cases in recent years is the lack of rapport between patients and their doctors. "If a doctor loses that personal rapport, the patient is much more likely to bring suit. I have had cases where a patient accuses one physician of malpractice, but upon investigation, I find that it is another physician responsible—one with whom the patient or family has closer rapport—and they will decide not to proceed," he says.

Ogurak's advice to physicians? "Maintain a close personal relationship with patients, as well as practicing good, careful medicine. Putting the patient first—always—is the way to avoid a medical malpractice case."

MM

Ralph Heussner is a medical writer and study coordinator of the AIDS Clinical Trials Unit at the University of Minnesota. He is also the author of four books.

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2. Guttormson NL, Bubrick MP. Mortality from ischemic colitis. *Dis Colon & Rectum*, to be published.
3. Chatterjee SN. Use of GOR-TEX grafts as vascular access procedure for chronic hemodialysis. Abstract of a paper submitted to the European Society for Artificial Organs Eighth Annual Meeting, Copenhagen, August, 1981.
4. Thompson NW. Thyroid and parathyroid. In: Welch KJ, Randolph JG, Ravitch MM, et al., eds. *Pediatric Surgery*, 4th ed. Chicago: Year Book Medical, 1986: vol 1, 522-33.

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What Happens in a Malpractice Action?

Jack Kleven

Editor's note: Midwest Medical Insurance Company (MMIC) is the medical malpractice carrier for approximately 68 percent of Minnesota physicians available for coverage. Although this article specifically describes MMIC's claims handling process, these procedures are similar for all insurers. The Minnesota Medical Association is the total class B stockholder in MMIC.

The claim and legal processes involved in medical malpractice actions are foreign and bewildering to many physicians. This article outlines some of the basic elements of malpractice lawsuits and describes the Midwest Medical Insurance Company's process for managing claims and lawsuits. Understanding the process can reduce the stress physicians experience when malpractice allegations are made against them.

What Is Malpractice?

Medical malpractice is a specialized form of the civil cause of action for negligence. In order to prove the claim of malpractice, the plaintiff must show that the treatment rendered was not within the standards of care followed by physicians in good standing in similar practices and under similar circumstances. Standard care may encompass a wide range of acceptable treatment methods in any particular medical situation. If a case proceeds to trial, expert witnesses will be called by both sides to testify to the applicable standard of care.

What Is an Active Lawsuit?

Summons and complaint: By serving the summons and complaint on a physician, the plaintiff has formally commenced a lawsuit. In Minnesota, the defendant has 20 days from the

date of service to serve an answer to the complaint, unless an extension is granted.

Investigation: Investigations typically include obtaining and reviewing all pertinent medical records. A claim professional interviews the physician defendant and any other

“Many claims are asserted and resolved without advancing to litigation.”

available witnesses in an effort to gather additional information regarding the medical care rendered. In most cases, review by other physicians is necessary to fully uncover and assess the medical issues involved. Contact is made with the plaintiff's attorney to determine and evaluate the theories of liability and extent of damages being alleged.

Disposition: If, after reviewing all available information, MMIC concludes that the case is defensible, it refers the lawsuit to a defense attorney.

If review of the case indicates significant obstacles to a successful defense, MMIC seeks the insured's consent to a settlement so that negotiations with the plaintiff's attorney may begin. A settlement offer is not considered an admission of liability. Early settlement of appropriate cases eliminates the time and expense of legal discovery and trial and usually reduces the amount of indemnity payment. Frequently, MMIC is able to resolve lawsuits without retaining defense counsel.

Answer: If a defense is called for or formal legal discovery is necessary, MMIC retains a defense attorney to serve an answer to the plaintiff's complaint on behalf of the insured. It is crucial that the answer be filed promptly. Thus, it is very important that the insured respond as soon as possible to MMIC or the defense attorney's requests for information or assistance.

Purpose of discovery: During the pretrial period of discovery, each party questions the other about the medical and legal issues in the case. The intent is to narrow the issues that must be tried, obtain additional facts, and elicit other information that might lead to dismissing or settling the case. MMIC continues to work with the defense attorney during the discovery phase of the proceedings to determine how the case should best be handled.

Interrogatories: The plaintiff and the defendant may serve interrogatories (written questions) to the other party in an attempt to learn basic facts about the case. If the insured defendant is served with interrogatories, the defense attorney will fully explain the process for completing and reviewing answers to the interrogatories. Minnesota Rules state that answers or objections to the interrogatories must be made within 30 days after service of the interrogatories (or within 45 days after service of the summons and complaint). Again, it is essential that this time limit be observed and answers to interrogatories be written without delay.

Depositions: A deposition is an out-of-court statement taken under oath by a witness or a party to a lawsuit. Under the Minnesota Rules of Court, the plaintiff's attorney is usually prohibited from having direct contact with the defendant. Pri-

or to trial, the only time the other side is able to question the defendant directly concerning the medical care and treatment rendered is when the defendant's deposition is taken. The deposition is a very important part of the litigation. It is not only a time to

in the industry. Obviously, lawyers are retained to provide physicians' legal defense, but the MMIC Claim Department investigates, evaluates, negotiates, and controls the cases. When active litigation occurs, MMIC continues to be actively involved with the litigation to conclusion.

The most notable aspect of MMIC's program is its success in resolving claims and suits without needless litigation. About seven key plaintiff firms are involved in most of the major cases. Essentially, MMIC has established a cooperative working relationship with these adversaries, which has enhanced its credibility with the rest of the plaintiffs' bar. MMIC conducts investigations and evaluations simultaneously with the plaintiff attorney's workup of the case. It elicits the plaintiff's theories, substantiation, expert support, and settlement demands. In conjunction with its own factual investigation, medical-legal reviews, damage analysis, etc., MMIC evaluates the strengths and weaknesses of the plaintiff's case. The idea is to do all of this in the prelitigation phase. Usually, MMIC resolves claims and suits without any active litigation or legal expense. The claim staff is able to determine whether or not the case has settlement value and conclude it accordingly. If the case is defensible, MMIC stands a good chance of dissuading the plaintiff's attorney from further pursuit.

What Is the Physician's Role in Claim Handling?

The insureds are deeply involved in the investigation, evaluation, and disposition of MMIC claims. They provide an invaluable source of information, and their participation is welcomed in the resolution of claims. MMIC always attempts to reach concurrence with the insured on whether or not to settle a case. Although it is ultimately the company's decision, every effort is made to reach agreement with the insured. If an insured adamantly disagrees with the claim staff's desire to settle a case, the matter can be appealed first to the Claim Committee and then to the Board of Directors at the option of the in-

sured. Less than 1 percent of MMIC's paid cases have involved internal appeal on the issue of consent to settle. However, this mechanism ensures that MMIC physicians are involved in the settlement process.

Insured physician involvement is even more important now because insurers must report payments to the National Practitioner Data Bank with a copy to the state Board of Medical Practice. This reporting has been required since September 1, 1990, and our experience indicates that physicians are showing more resistance to settling cases with payment. MMIC is very willing to fully explore the defensibility of cases with its insureds

"A settlement offer is not considered an admission of liability."

learn additional facts; it gives the plaintiff an opportunity to assess the defendant's potential credibility and demeanor as a witness at trial. The defense attorney meets with the insured to explain how depositions are conducted. Sufficient time must be allowed to review all aspects of the case. The defense attorney attends the deposition along with the physician. Similarly, the defense attorney may depose the plaintiff.

Trial: Very few malpractice cases actually go to trial. The majority of cases are dismissed or settled before they reach the trial stage. If the case does proceed to trial, the defense attorney works closely with the defendant to prepare his or her testimony. During the pretrial period, MMIC and the defense attorney answer any questions the physician may have concerning the mechanics of a malpractice trial.

How Are Claims Managed?

The preceding information refers to an active lawsuit. Many claims are asserted and resolved without advancing to litigation. MMIC works diligently to prevent claims from needlessly becoming lawsuits. Even if there is a lawsuit, MMIC attempts to stop active litigation to allow the parties an opportunity to resolve matters in a less formal and less costly manner.

MMIC performs all claim handling functions. It does not rely on lawyers or other outside services to perform claim duties. While this would seem axiomatic to a well-run department, it is seldom accomplished

"MMIC's indemnity payments are well below national averages."

so that the preferred form of resolution is chosen and understood. Although Data Bank reporting has resulted in more interaction with our insureds, our consent-to-settle process continues to work well.

Physicians are also significantly involved in the claim process in another manner. The staff relies heavily on the medical community for medical expert reviews to help clarify standard of care, causation, and damages issues. It is not unusual to obtain numerous expert reviews on the same case.

Additionally, MMIC physicians serving on the Claim Committee and the board review major cases for settlement and upcoming trials. The Claim Committee is provided a summary of all closed claims and suits, and the board is advised of major settlements.

How Successful Is MMIC's Approach?

Various statistics indicate the success of MMIC's philosophy and approach. At this time, the best available comparative statistics are derived from the Physician Insurers Association of

America, which has compiled data from about 20 physician-owned companies over the last several years. MMIC is closing cases almost twice as fast as the PIAA average. On closed cases, our average legal expense is less than half of the PIAA average. Through 1991, average indemnity payments have been controlled and are well under national averages; in 12 years, MMIC has paid indemnity on only one-third of all closings. All of this has contributed to premiums ranking in the lowest 10th percentile nationally, according to the most recent available data.

The MMIC claim management team recognizes that its job is easier because MMIC is a physician-owned company. Physician cooperation is vital to our success. **MM**

Jack Kleven is the claim vice president for Midwest Medical Insurance Company. He has over 22 years of medical malpractice experience, and in his 10 years with MMIC, he has been active in claim and risk management and tort reform efforts.

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Health Care Reform and Medical Malpractice in Minnesota

Kay Nord Hunt, J.D., and Marc A. Johannsen, J.D.

Although the Legislature's pen did not sweep as broadly in the area of malpractice reform as many would have hoped, the changes included in the Minnesota Health Right Act are nonetheless laudable.

Born of controversy, the state's new health reform law makes three substantive changes to existing Minnesota medical malpractice law. First, it provides a structure for the commissioner of health to follow in establishing practice parameters for specifically identified medical conditions. These parameters will then be used to gauge delivery of care for these conditions. Second, the law sets specific guidelines for conducting written discovery in malpractice litigation. Third, the statute directs trial judges to require parties to consider alternative dispute resolution before proceeding to trial. This article briefly discusses each of these changes.

The Practice Parameter Defense

Of the three malpractice changes included in the Minnesota Health Right Act, the establishment of a structure to create practice parameters will likely have the most far-reaching impact. The law mandates that the commissioner of health establish a 15-member practice parameter advisory committee composed of health care professionals and representatives of the research community and the medical technology industry. After consulting with this committee, the health care analysis unit, and the Minnesota Health Care Commission, the health commissioner will establish practice parameters for a limited number of conditions. The act defines a practice parameter as: "A statement intended to guide the clinical decision making

of health care providers and patients that is supported by the results of appropriately designed outcomes research studies, including those studies sponsored by the federal agency for health care policy and research, or has been adopted for use by a national medical society."

"Practice parameters
will be necessarily
broad and excessively
conditional."

The health care analysis unit is charged with collecting the necessary data from health plans and health care providers to formulate the practice parameters. To facilitate the task, the unit has authority to require health care providers and plans to provide patient health records. All disclosed data that identify individual patients will be classified as private data, and data that identify health care providers will be non-public data under the Minnesota Data Privacy Act. Consequently, such data will not be widely disseminated. The statute gives the health care provider licensing boards in Minnesota the authority to discipline any health care provider who refuses to comply with the request for information.

The emphasis in data collection will be on conditions that account for significant total costs when considering both the frequency of the condition and the cost of treatment. The first data collection efforts will focus on examining inpatient or outpatient conditions commonly treated in hospitals or in free-standing outpatient

surgical centers. The collected data must allow comparisons to be made between providers, health carriers, and public programs. The data collectors are encouraged to use existing database information currently maintained by Medical Assistance and Medicare. Types of data collected will include statistics on mortality, morbidity, patient functional status, quality of life, symptoms, and patient satisfaction with the care provided.

Once the information is collected and analyzed, the commissioner of health, after consulting with the three relevant commissions, may approve a practice parameter for yet-to-be-identified specific medical conditions. The commissioner will use rule making to approve newly developed practice parameters and parameters that the health care analysis unit has substantially revised. The commissioner is exempt from rule-making procedural requirements when adopting practice parameters approved by the federal Agency for Health Care Policy and Research or accepted for use by a national medical society or national specialty society. The new law directs the health care analysis unit to support, promote, and disseminate parameters for specific, appropriate conditions and disseminate the research findings on which these parameters are based to all practitioners in the state who diagnose or treat the medical condition.

Once the commissioner adopts a practice parameter, the health care provider's adherence to the adopted parameter is an *absolute defense* to medical malpractice claims that the physician deviated from the accepted standards of practice in the community. Moreover, evidence of the departure from the standard is only admissible to the extent that it is used

to determine whether the health care provider is entitled to the defense at all. The act, however, does not change the standard or burden of proof in actions alleging a delay in diagnosis, misdiagnosis, inappropriate application of a practice parameter, failure to obtain informed consent, battery, or other intentional tort, breach of contract, or product liability. The practice parameter defense will be applicable to new malpractice claims arising on or after August 1, 1993, or 90 days after the commissioner of health approves the applicable practice parameter.

The development of practice parameters will likely proceed slowly. Given the significance of such parameters, the commissioner will attempt to ensure the validity of the parameter before imposing it on health care providers in this state. By participating in the process, physicians will have an opportunity to help mold the parameters that the commissioner ultimately sets.

From a malpractice standpoint, practice parameters could benefit physicians by ending the confusion about when to do specific procedures for conditions that are essentially static, for example, x-rays for screening well patients and the use of mammograms. The physician in these circumstances is not dealing with a sick patient and is not attempting to understand any apparent symptoms or to make a diagnosis.

In more dynamic clinical situations, however, practice parameters will be necessarily broad and excessively conditional in describing how a doctor should function. Consequently, any attempt to invoke the parameters as a defense in a misdiagnosis case will likely run into claims that the physician did not meet the conditions or requirements of the practice parameter. In this respect, it is likely that most defense counsel will not bring practice parameters to the jury's attention in defending typical cases involving clinical misdiagnoses or claims of improper treatment. Defense lawyers will need to be aware that bringing practice parameters to the attention of the jury as a defense, in effect, puts them "into play" and virtually requires the

defense counsel to prove compliance with the parameter. Once a practice parameter is brought to a jury's attention, compliance with that parameter will likely become the sole focus of the case. Since most malpractice cases involve fact disputes rather than arguments about the standard of care, the use of practice parameters will not essentially change the physician's position in defending claims.

Moreover, practice parameters will be subject to the same shortcoming as are statutes in serving as guidelines. Because they will be the result of compromise between committees, practice parameters most likely will be ambiguous, which will provide courts and lawyers many opportunities to interpret and reinterpret terms of the parameters.

If the practice parameter drafting committee could be persuaded to publish standardized disclosures to patients in connection with defined surgical procedures, the parameters would go a long way in diffusing negligent non-disclosure litigation. If the physician could have a standardized disclosure approved by the practice parameter committee—covering a hysterectomy, for example—the disclosure could be incorporated into the hospital forms and would become absolute evidence of compliance with standards and terms on informed consent claims.

In the final analysis, the burden of persuasion will remain with the expert witnesses and the lawyers in malpractice cases. If a practice parameter can be used to obtain a dismissal from a judge, it will become a useful tool in the arsenal of defense. Instances in which practice parameters will result in a grant of dismissal before trial will likely be rare, and, for the most part, defense counsel will not invoke these parameters during a jury trial.

Written Discovery Guidelines

Next, the Minnesota Health Right Act establishes specific guidelines for conducting written discovery in malpractice litigation. It directs that attorneys may only exchange the uniform interrogatories specifically set forth in the statute, plus 10 non-

uniform interrogatories. The statute contains uniform interrogatories for plaintiffs and defendants in the litigation. If both parties agree, or if the court issues an order based on good cause, the parties may pose additional questions. Prior to the new legislation, each attorney would draft interrogatories for each new case. Use of the uniform discovery procedures may help contain malpractice litigation costs.

Alternative Dispute Resolution

Finally, the law requires the court to explore alternative dispute resolution possibilities with the parties prior to trial. At the time of issuing its order for trial, the court must require the parties to discuss whether alternative forms of dispute resolution, such as arbitration or mediation, would be appropriate in that case. The court, however, cannot compel alternative dispute resolution under the terms of the amendment. All parties must unanimously agree to the specific form of the alternative dispute resolution before it can proceed. The changes came about in response to a movement in the law to encourage litigants to resolve their disputes outside the courtroom. The often-quoted rationale for promoting alternative dispute resolution is that parties who participate in the resolution of their disputes are usually more satisfied with the outcome than parties whose disputes have been handled by a court. The true test of this change will be in the parties' willingness to resolve their disputes outside the courtroom.

Only time will reveal the ultimate impact of Minnesota's new health legislation on medical malpractice and our entire health care system. MM

Kay Nord Hunt is a shareholder in the firm of Lommen, Nelson, Cole & Stageberg, P.A., and Marc Johannsen is an associate attorney with the firm. The firm practices in a variety of areas, including medical malpractice defense, health law, and all facets of insurance defense.

Minnesota's Health Care Reform Act

Will the New Law Founder on Antitrust Fears?

Thomas F. Pursell, J.D.

Minnesota Attorney General Hubert H. Humphrey III launched in mid-1990 a high-priority antitrust enforcement program against alleged anticompetitive practices in the health care industry. The first targets were three Mankato-based corporations: Southern Minnesota Health Alliance, Southern Minnesota Physicians, P.A., and Hospitals of Southern Minnesota. Humphrey alleged that member providers used the corporations to boycott managed care companies, fix prices, and monopolize local health care markets. In a widely publicized settlement, the defendant corporations paid a hefty civil penalty, dissolved their operations, and agreed to provide a significant amount of free care over a five-year period, although they denied any wrongdoing.

In July 1991, Humphrey leveled similar charges against Mid-Minnesota Associated Physicians of Alexandria; and in April of this year, he sued the Central Minnesota Health Care Alliance, Central Minnesota Physicians, and St. Cloud Area Health Associates.

Physician-hospital combinations have not been the office's only antitrust targets. In December 1990, 37 states filed a federal antitrust suit against Sandoz Pharmaceuticals over its marketing of the anti-schizophrenia drug Clozaril. Sandoz only sold the drug along with a high-priced package of blood testing and patient monitoring services. Attorney General Humphrey's Antitrust Division acted as lead counsel in the suit, which challenged the "Clozaril Patient Management System" as an illegal tying arrangement and as an attempt to monopolize the market.

More recently, the attorney general filed suit to stop the impending merger of Health One and LifeSpan

on the grounds that the combination of the two large hospital companies would be anticompetitive. (A settlement has since been reached that allows the merger to proceed but requires that it be reviewed under the Minnesota Health Right Act.)

Many providers have said they

"Minnesota's health care reform act lays a solid foundation for antitrust immunity."

do not understand the basis of the state's antitrust actions. There's no doubt about it—antitrust enforcement is powerful medicine; but there's no mystery about the cases the office has brought or about the essential purpose of antitrust.

The philosophical basis of state and federal antitrust laws is the notion that free-market forces ensure the greatest volume of high-quality, low-cost goods and services to the most people. It should be no surprise, then, that all of the attorney general's antitrust cases grew out of business arrangements designed to stymie market forces and control competition among health care providers.

Antitrust principles apply to virtually all unregulated aspects of businesses, but many people argue that free markets do not contain costs and improve quality in the health care industry, as they do in other sectors of the economy. The 1992 Minnesota Legislature listened to those arguments, and article I, section 14, of the Minnesota Health Right Act establishes a process to sanction business

arrangements that can be shown to improve health care quality, access, and affordability but that otherwise violate state and federal antitrust laws.

Passage of the "antitrust exceptions" provision in the new law has not completely allayed antitrust fears, however. Providers have some reason for concern; in this, as in any instance where a state legislature acts to except business from federal antitrust liability, success ultimately hinges on whether state efforts meet a rigorous immunity test developed by the United States Supreme Court.

Some providers also worry that the state's new health reform law requires them to collaborate in ways that seem to invite antitrust scrutiny but that will not have gone through the section 14 antitrust exceptions process.

Industry watchers around the state are asking: Is the new law doomed to founder on the rocks of antitrust fears?

The answer, from my perspective, is that there is no rational reason why fear of antitrust liability should jeopardize the Minnesota experiment. As demonstrated in the following examples, health care providers can work collectively with government, just as competitors do in other industries, without unlawfully restraining trade. To the extent that good public policy means displacing competition, the antitrust exceptions process should shield successful applicants from antitrust attack.

Competing Providers and Regional Planning

Article I, section 6, of the Minnesota Health Right Act establishes authority for several "regional coordinating organizations" to be composed

of providers and others. Members of the regional coordinating organizations are supposed to begin "formulating the appropriate structure for organizing the delivery networks or systems" for their regions, pursuant to article I, section 6, of the act.

The potential antitrust problem

"Many people argue
that free markets do
not contain costs
and improve quality
in the health care
industry."

is this: Competitors cannot sit down together and decide among themselves, directly or indirectly, who will sell what to whom. Thus, competing health care providers who meet to discuss how their regions' markets should be organized normally invite suspicions that they are unlawfully restraining trade. And, indeed, competitors who, outside any governmental process, take the further step of actually agreeing to reorganize their markets are almost certain to be in violation of the law.

But using the same discussion about market structure to convince government that the reorganization is good public policy changes both the appearance of the discussion and the legal analysis. The antitrust laws do not prohibit competing providers from developing and presenting to the state a plan for how their industry ought to work—so long as they do not use that process as a sham to cover what is actually a tacit or explicit agreement to restrain trade.

The regional coordinating organization scenario brings into play a doctrine of antitrust law flowing from two United States Supreme Court cases, *Eastern Railroad Presidents Conference v. Noerr Motor Freight, Inc.*,¹ and *United Mine Workers of America v. Pennington*.² The *Noerr-Pennington* Doctrine recognizes that the First Amendment permits people

to petition government even for the most venal of reasons. In short, the common sense rule of *Noerr-Pennington* is this: people and organizations don't violate the antitrust laws by asking their government to restrain trade; they only do so by agreeing to restrain trade themselves without government oversight.

The important practical consequence of this rule is that the provider collaboration inherent in the regional coordinating organizations can go forward without going through the antitrust exceptions process. The participants do not need an exception because, if they are essentially collaborating with government, they violate no law.

While the kind of provider collaboration necessitated by the regional planning processes does not need to go through an exceptions process, other kinds of provider agreements would. How would an actual agreement to divide markets fare under the law? If the arrangement passed the "antitrust exception" process of article I, section 14, it would almost certainly stand up to a federal antitrust challenge.

Section 14 was written to enable the state, through the commissioner of health, to confer the so-called "state action" immunity on conduct that would otherwise violate federal antitrust law. Such a process is necessary because, while the state Legislature has complete control over the reach of its own state antitrust law, the U.S. Supreme Court has narrowly circumscribed the states' ability to depart from the national policy favoring competition in interstate commerce. Federal courts will find "state action" immunity when a state legislature, in the words of a leading opinion, "clearly articulates and affirmatively expresses" an intent to displace competition with regulation and thereafter "actively supervises" any anticompetitive conduct to ensure that the public interest is protected.³

Article I, section 14, of the new law explicitly recites the Minnesota Legislature's intent to displace competition with regulation and active supervision. It also provides a process for the commissioner of health

to consider applications for exceptions, establishes criteria for review ("likely to result in lower health care costs, or greater access to or quality of health care, than would occur in the competitive marketplace"), and gives the commissioner the power to prohibit arrangements, or parts of arrangements, that are not likely to lower costs, improve quality, or increase access. The commissioner also has authority to make rules in order to achieve the purposes of the antitrust exceptions sections.

Unfortunately, while the federal cases are clear on the two conditions for attaining state action immunity, they are not so settled on how the law should be applied to different facts. Most of the debate in this area centers on what constitutes "active supervision."⁴

In *Patrick v. Burget*,⁵ a case involving anticompetitive manipulation of the physician peer review process, the Supreme Court held that: "[A]ctive supervision ... requires that state officials have *and exercise* power to review particular anticompetitive acts of private parties and disapprove those that fail to accord with state policy" (emphasis added).⁶

In the *Patrick* case, the state merely established a peer review process without building in procedural

"Activities that are
not immune are still
subject to the full
force of the antitrust
laws."

safeguards to ensure that peer review would not be used for anticompetitive purposes. The right of an injured party to challenge the decision in court was not enough of a safeguard, the court ruled.

Recently, the court agreed with the Federal Trade Commission that several title insurance companies violated the antitrust laws by agreeing on prices to be charged for certain services they performed in connec-

tion with the sale of title insurance in Montana and Wisconsin. Both states received rate request filings from the companies. By law, the rates took effect unless the state insurance departments disapproved them within a specified period. The actual review of the rate requests was cursory, however, consisting mainly of a check for mathematical errors.

When the FTC sued the title insurers, challenging their "collective rate making" as an illegal price-fixing conspiracy,* the companies

"There is no rational reason why fear of antitrust liability should jeopardize the Minnesota experiment."

claimed "state action" immunity. The states, the companies argued, had comprehensive regulatory systems in place. The agreed-upon rates were actually scrutinized by state officials. The defendants argued that if the bureaucrats dropped the ball by not doing a more thorough review, that was their fault, not the defendants'.

In *Federal Trade Commission v. Ticor Title Insurance Co.*,⁷ handed down in June of this year, the court rejected the companies' reasoning, holding that such collaborative price-setting arrangements are not immune unless the state "[plays] a substantial role in determining the specifics" of the resulting prices. Passive acceptance of a rate that may or may not be reasonable is not enough.

Ticor does not draw distinct enough lines to allow antitrust

lawyers to predict with 100 percent accuracy how much state regulatory involvement will constitute "active supervision" in any given case. What is clear is that the state must play a meaningful role in determining whether departures from the competitive model are ultimately in the public interest; the greater the public involvement, the more likely the parties are to be immune.

The point is this: the Minnesota Health Right Act lays a solid foundation for antitrust immunity, but with active supervision, the proof of the pudding is in the eating. A state legislature may give an agency the power to "actively supervise," and article I, section 14, does so; but a federal court may not find immunity unless the agency has *and exercises* the power over the specific arrangement in question.

In the hypothetical case, the applicant would have to show that the market division agreement would enhance quality and access and help contain costs—probably not a realistic scenario. In the more probable real-life situation, however, Minnesota providers have every reason to expect that the antitrust exceptions provisions will be successfully implemented. Attorney General Humphrey recognizes the enormous public interest at stake, and his staff is giving the new legislation top priority. The Health Department is keenly aware of the importance of antitrust and provider conflict-of-interest issues; the two agencies are coordinating their policy positions and plan to collaborate with interested parties in drafting the antitrust exception rules. The purpose of such efforts is to ensure that those who successfully complete the application process will receive state action protection.

People in the industry should note, however, that activities that are not immune are still subject to the full force of the antitrust laws. The office's goal in enforcing the antitrust laws in the health care industry has always been, and will continue to be, to maximize access to high-quality health care at the lowest possible price to buyers of care. That goal is entirely consistent with the goal of the new law—to maximize access to

high-quality health care while containing consumers' costs. It is therefore unlikely that the new law will change the philosophy of any antitrust enforcement agency. In particular, private provider combinations intended to thwart cost-containment efforts will almost certainly remain a prime target of both state and federal antitrust enforcers. The preference will continue to be, however, to educate providers to *avoid* problems.

Capital Expenditures and Provider Collaboration

Another often-mentioned section of the new health reform law also raises the issue of provider collaboration. Consistent with the legislative goal of controlling spending on capital equipment, article I, section 8, directs the commissioner of health to retrospectively review certain capital expenditures and spending commitments. Providers who do not meet certain conditions may then be prohibited from making future expenditures for five years.

One of the events that may trigger this sanction is a provider's "failure to pursue collaborative arrangements. ..." It seems clear, in this context, that the "collaborative arrangements" referred to in section 8 are arrangements to reduce spending on major capital improvements and costly, duplicative equipment. Does this kind of collaboration pose antitrust problems?

Clearly, it could. Competitors cannot normally agree among themselves to control purchases of production equipment, an arrangement sure to limit at least the potential output of services. Agreements among competitors to limit output are generally treated the same in antitrust law as agreements to fix prices or allocate markets.

But here again, providers have at least four ways to "collaborate" without liability. First, providers can reduce duplicative capital expenditures by entering into legitimate joint production ventures, as when two hospitals, or a hospital and clinic, jointly acquire a new piece of diagnostic equipment that would not otherwise be available in the market.

*It is worth noting that the FTC sued over the insurers' *implementation* of the agreed-upon prices, not the insurers' *submission* of the proposal to the government. As discussed above, the latter is protected under the *Noerr-Pennington* Doctrine.

Second, providers could meet to discuss recommendations for presentation to government officials, as permitted under the *Noerr-Pennington* Doctrine. Again, so long

as there are no agreements about how to affect the market outside the process of the new law, there is no antitrust liability.

Third, as a general rule, only

collaboration among *competitors* poses significant antitrust issues. It is therefore possible, even outside *Noerr-Pennington*, for providers to engage in meaningful discussions and planning. For example, one useful dialogue might be between providers and third-party payers, about how they—the buyers and sellers of health care services—could work together to keep down costs or eliminate inefficiencies.

Fourth, the antitrust exceptions process could be used to sanction provider collaboration that would otherwise violate the antitrust laws.

Final Thoughts

Finally, those considering new business arrangements to meet the health care economics of the '90s should know that state and federal antitrust agencies typically will help people by stating what their enforcement position would be in certain situations. But there is, of course, an important difference between 1) acting first and then asking for help or for an exception and 2) asking the attorney general or the commissioner to review a prospective arrangement. To be safe, participants in any industry must get their clearances or exceptions *before* they act.

Minnesota's health care reform act may or may not do what the 1992 Legislature wanted it to do, but if it fails, it will not be because of some irreconcilable conflict with the antitrust laws. MM

Thomas Pursell is Minnesota deputy attorney general in charge of law enforcement. He previously served as assistant attorney general in charge of the Antitrust Division.

REFERENCES

1. 365 U.S. 127, 81 S.Ct. 523 (1961).
2. 381 U.S. 657, 85 S.Ct. 1585 (1965).
3. *California v. Midcal Aluminum*, 445 U.S. 97, 100 S.Ct. 937 (1980).
4. *Midcal*, 445 U.S. at 105-106, 100 S.Ct. 937, 943.
5. 436 U.S. 337, 108 S.Ct. 1658, 1663 (1988).
6. *Patrick*, as quoted in *Health Care Equalization Committee v. Iowa Medical Society*, 851 F.2d 1020, 1024 (8th Cir. 1988).
7. _____ U.S. _____, 112 S.Ct. 2169 (1992).



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Searching for Answers

Using Computers to Find the Literature You Need for Patient Care

Julia A. Kelly, M.S., M.L.I.S., and Steven D. Hillson, M.D.

ABSTRACT

The medical journal literature is extensive and contains information that can help physicians care for patients. Minnesota physicians are able to tap into a variety of resources to help them locate relevant articles. Literature searches may be run by librarians in a local hospital library, a larger health sciences library, or via various professional associations. Physicians interested in conducting their own searches are able to use local systems or dial into national ones. Innovations in computers will allow easier and faster access to the medical literature in the future.

The practice of medicine requires that physicians have accurate information on many topics. Often, an important question arises that requires knowledge the physician does not possess. What might your patient expect from percutaneous angioplasty in single-vessel coronary artery disease? Will transcatheter electric nerve stimulation help your patient with low back pain? When questions like these come up, it is valuable to have easy access to the journal literature.

Medicine's journal literature is vast, but computers have made it easier for physicians to delve in and locate material that applies specifically to their patients. A 1991 study based in Rochester, New York, revealed that 80 percent of the more than 200 responding physicians had handled some aspect of patient care differently because of information provided to them by a hospital library, and 19 percent said that the information contributed to their ability to avoid patient mortality.^{1,2} A recent editorial in the *New England Journal of Medicine* urges practitioners to seek out new developments in the literature and use their own judgment to decide if the developments are appropriate for their patients.³ An accompanying article concluded that the publication of randomized clinical trials of cardiovascular drugs influenced practice patterns.⁴

The most important step in finding an answer to your question in the journal literature is to formulate the question carefully. Be as specific as you can. "Does magnesium affect the course of acute myocardial infarctions?" is better than "What is the story on magnesium and heart disease?" "Does treatment with magnesium affect inpatient mortality in patients with acute myocardial in-

farctions?" is even better.

Now look at the question. Is it likely to be in standard textbooks or handbooks? Frequently, questions about pathogenesis, common complications of diseases, use of standard therapies, and disease epidemiology may be answered in such sources. These are much easier to use than journals, and they represent distilled, often consensus views of available information. Is the question really one of knowledge? Often your question is actually an issue of judgment that could only be gained by experience in a particular area. At such times, using a reliable consultant may be a more sensible way to get an answer.

Actually locating the information in the journal literature is a two-step process: finding out if relevant articles exist by using electronic databases or printed indexes and getting copies of those articles. Until a decade ago, hunting for journal articles meant thumbing through volume after volume of *Index Medicus*. Today, electronic databases, which contain citations and sometimes abstracts of individual articles, are available via the computer. You may use authors, subjects, words in the title or abstract, or a number of other parameters to focus the search.

MEDLINE, the electronic counterpart of *Index Medicus*, is a comprehensive database with its main emphasis on clinical medicine. It is widely available and fairly inexpensive. There are a number of other health sciences databases, many of which cover more narrow topics, such as health care administration, toxicology, and bioethics.

If you would like to access any of these databases, you have two options: have someone do a search for you or do it yourself.

Having a Search Run

No matter what type of practice you are in or where you are located, there are services that will run database searches for you, sometimes at no cost. Usually, the nearest connection is through the hospital with which you are affiliated. If you are unsure of your hospital's connection to library services, check with the hospital administration or an information-wise colleague.

Larger hospitals generally have a librarian who can conduct searches. Smaller hospitals and clinics often are linked to larger institutions for the purposes of referral and resource sharing, and those links may mean access to library services. For example, physicians at the Virginia Regional Medical Center in Virginia, Minnesota, are part of the University

“Computers have made it easier for physicians to delve in and locate material that applies specifically to their patients.”

of Minnesota's Upper Midwest Healthcare Network. They are able to request searches electronically and have them delivered the same way.

Many larger hospital libraries will provide searches to physicians who have referred patients to their institutions. Some libraries, including those at North Memorial Medical Center, Mayo Clinic, and the University of Minnesota, will run searches for non-affiliated health professionals for a fee. The library at Abbott Northwestern Hospital contracts with smaller hospitals to provide searching and photocopy services for hospital staff.

In addition to the library connection through your hospital, many professional associations have libraries and will provide searches for their

members, and in some cases they are free. In Minnesota, the Ramsey County Medical Society will conduct searches for members, and nationally, a number of organizations, including the American Medical Association (312/464-4842), the American Academy of Family Physicians (816/333-9700, Ext. 4400), and the American College of Obstetrics and Gynecology (202/638-5577), provide searches as part of their service to members.

Conducting the Search Yourself

If you would like to search the health sciences databases yourself (becoming an “end user” in computer lingo), you may either use a personal computer to connect to one of the companies or “vendors” that sells access, or you may use a local system that is connected to a hospital or academic library.

To use a personal computer to search the health sciences databases, you must also have a modem, which allows you to connect to other computers via telephone lines. Several vendors offer access to databases of interest to physicians; the features they offer vary somewhat, as do the number of databases they have.^{5,6} Charges are generally per minute you are connected and per citation you view, and many of the systems offer a user-friendly option with menus and frequent prompts as well as a command mode. (See the sidebar, page 41, for a list of selected vendors.)

More and more physicians are able to do their own searching on local systems connected to the hospital library. MEDLINE and many other medical databases are available in CD-ROM (compact disk-read only memory) format. The disks, which look just like audio compact disks, are accessed on a personal computer using a special disk drive. Some CD-ROM systems are networked, allowing searching from offices, labs, and patient care areas as well as in the hospital library. Several of the larger health sciences libraries in Minnesota, including those at the University of Minnesota, Abbott Northwest-

ern, and North Memorial, allow non-affiliated physicians to come in and try their local search systems.

Locating Copies of Articles

Once you have identified the citation to an article, the next step may be as simple as going to a shelf in your office and retrieving the issue that contains it. A call or fax to the hospital library may also produce a copy. If not, the library may request it via interlibrary loan from another library.

Virtually all health sciences libraries in the United States are part of the National Network of Libraries of Medicine, and many are connected to a computer network that allows interlibrary loan requests to be sent electronically. Articles that are related to direct patient care can be requested on a rush basis and are often delivered by facsimile.

A number of other means exist to obtain the full text of articles identified in literature searches. Your public library may not have a large collection of medical journals, but even the smallest public library will order photocopies through interlibrary loan from other institutions. Many of the same resources mentioned above as sources of searches are also sources of documents.

The larger hospitals and academic libraries will often photocopy articles for non-affiliated health professionals for a fee, and some offer speedy delivery by such methods as fax, express mail, and courier delivery. Most of these libraries are also open to the public and have inexpensive self-service photocopy facilities. The local and national professional societies are another source of photocopy services, and costs are often very low.

Electronic methods of ordering and delivering documents are becoming more common. Some of the vendors, such as BRS Colleague, offer databases that contain the full journal articles. While downloading the article or reading it online may not be cost-effective if the hospital library two blocks away owns a copy, it may save a good deal of time and money if the nearest paper copy is 50 miles away.

Some search systems, such as

Selected Vendors of Health Sciences Databases

BRS Colleague
8000 Westpark Drive
McLean, VA 22102
800/955-0906

Dialog Medical Connection
3460 Hillview Drive
Palo Alto, CA 94304
800/334-2564

Grateful Med
National Library of Medicine
8600 Rockville Pike
Bethesda, MD 20894
800/638-8480

Paperchase
Beth Israel Hospital
330 Brookline Avenue
Boston, MA 02215
800/722-2075

Grateful Med, allow online ordering of photocopies while you search. The library to which the requests are forwarded is determined ahead of time, and the order is electronically transmitted to it.

Trends in Medical Information

Watch for changes in computer technology that will make access to journals even easier. More and more databases are including entire articles instead of just the citation and abstract, so you may be able to locate information on the newest cephalosporins in one step instead of two. Automatically receiving weekly or monthly updates on a topic is possible today, and the future will bring quicker delivery of results via electronic as well as regular mail and fax.

New CD-ROM products that contain all articles from a number of journals for multiple years are also beginning to appear. CD-ROM drives are not expensive, and one disk is able to hold up to 250,000 pages of text, so these are products that small hospitals and clinics may find attractive.

More libraries and professional societies are able to accept requests

for searches and photocopies via electronic mail, and some are able to deliver the results electronically, as well. Journals that exist only in electronic form are also beginning to appear. The *Online Journal of Current Clinical Trials*, which debuted in July 1992, is cutting down the time between submission and publication of articles and making valuable clinical information available much more quickly. **MM**

Julia Kelly is assistant librarian at the University of Minnesota Bio-Medical Library. Steven Hillson is a staff physician at Ramsey Clinic and assistant professor of medicine at the University of Minnesota Institute of Health Services Research, School of Public Health.

REFERENCES

1. Marshall JG. The Impact of the hospital library on clinical decision making: the Rochester study. *Bull Med Libr Assoc* 1992;80(2):169-78.
2. Joynt RJ, Marshall JG, McClure LW. Financial threats to hospital libraries. *JAMA* 1991;266(9):1220-1.
3. Kassirir JP. Clinical trials and meta-analysis. What do they do for us? *N Engl J Med* 1992;327:273-4.
4. Lamas GA, Pfeffer MA, Hamm P, Wertheimer J, Rouleau J-L, Braunwald E. Do the results of clinical trials of cardiovascular drugs influence medical practice? *N Engl J Med* 1992;327:241-7.
5. Schwartz DG. Techniques for accessing the medical literature: current available approaches (part I). *J Allergy Clin Immunol* 1988;82(4):544-50.
6. Haynes RB, McKibbon HA, Fitzgerald D, Guyatt GH, Walker CJ, Sackett DL. How to keep up with the medical literature: access by personal computer to the medical literature (part V). *Ann Intern Med* 1986;105(5):810-24.

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Doctor Ryberg received his medical degree from the University of Minnesota and served his medical internship at Letterman Army Medical Center in San Francisco. He completed his residency in neurology at the University of Minnesota and received special training in clinical electromyography.

Most recently, Doctor Ryberg completed a fellowship in pain management at Hennepin County Medical Center that emphasized chronic somatic and neuropathic pain problems, as well as cancer pain.

Doctor Ryberg will have office hours at Nine Ten Medical Place and Centennial Lakes Medical Center.

Doctor Tarrel is a graduate of the University of California and the Chicago College of Osteopathic Medicine. He completed his residency in Neurology at the University of New Mexico in Albuquerque and recently finished a fellowship emphasizing his interest in stroke and neuro-intensive care at Hennepin County Medical Center.

Additionally, Doctor Tarrel has a practice interest and training in osteopathic manipulative therapy and acupuncture.

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Another Abuse Problem

A. Stuart Hanson, M.D.

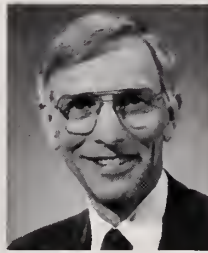
"Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it is the only thing that ever has."

—Margaret Mead

Over the last decades, alcohol and tobacco have become medical problems, and their abuse is now considered disease. The health care system has responded to these substances, which affect the lives and health of our population. Now we are being asked to look at physical abuse as another medical problem in need of attention.

Violence, abuse, and neglect are much more prevalent than most of us realize. Individuals are visibly injured by family members in more than 20 percent of American homes *each year*. Spouses beat each other, parents abuse their children, and children purposefully injure each other. While verbal abuse and physical blows occur about equally between the sexes, the stronger do more damage. Men injure their partners, parents injure their children, and older children injure their younger siblings. The cycle tends to repeat from generation to generation, inflicting deep psychological scars along with the broken bones and injured egos. Fear, intimidation, harassment, and physical beatings become a way of life until death intervenes too often by murder or suicide. The problem crosses all strata of society—rich and poor, conservative and liberal, white and people of color.

How well have physicians done in preventing, identifying, and treating violence and abuse? We see the aftereffects—the bruises, broken bones, rapes, emotional distress, and psychophysiologic syndromes. Some of us are alert, knowledgeable, and capable of early and effective inter-



**"We can be leaders
in solving one of
humanity's most
tragic conditions—
violence."**

ventions. But most of us do not realize when abuse and violence are major factors in our patients' lives. When we do identify problems, we are not equipped to treat patients effectively in this multifaceted and traumatic behavioral cycle.

Are violence and abuse medical problems? If physical and mental abuse keep people from happy, satisfying, effective lives, then they are our business. What can physicians do to change this complex behavior that affects more than 30 percent of the women in our society—a behavioral adaptation that presents in many forms and contributes significantly to the cost of health care?

First, we can declare our intent to work for a "Violence-Free Society." Some say that is a pie-in-the-sky idea that will never happen. I say, "If you don't think it's possible, it isn't." I believe it is possible to put an end to violence, abuse, and neglect, and to eliminate the use of fear, intimidation, and harassment in human behavior.

Second, our profession and the

health care industry need a self-assessment. Are we abusive? Do we teach by example or by intimidation and harassment? Do we treat our coworkers as colleagues who make significant contributions to patient care? Do we promote respect in our work and home lives? Or do we give orders, promote fear, and intimidate others in our daily work actions?

The Minnesota Legislature has declared that all state offices are to be "violence free." We need to declare all Minnesota health care facilities "violence and abuse free." Education programs that create awareness and build skills are needed. Employee assistance programs must be made available to those in need of help. Healthy health care workers will better serve the needs of patients experiencing abuse and neglect.

Finally, we need to look at the specialties, departments, and institutions in which we work. How can we be more effective in preventing, recognizing, and treating violence, abuse, and neglect? The Hennepin County Medical Society has initiated a project calling on medical staffs to address these issues in their hospitals. The AMA has formed the Coalition Against Family Violence and asks all of us to become members. The MMA has called for a Violence-Free Society.

Murder, assaults, rape, and suicide are all medical problems. The causes are multiple, and the health care system will not solve the problems alone. But we can make a difference. We have a responsibility, and we can be leaders in solving one of humanity's most tragic conditions—violence against each other. Join the effort. Form a task force in your hospital, medical group, company, community, or your church or synagogue. Heal thyself—then heal others.

MM



K. James Ehlen, M.D.
Chairman, CEO Medica

SURVIVAL STRATEGIES NEED A SURVIVAL TACTIC

Increasingly, professional journals, including this one, carry articles about the changing health care environment and the challenges it presents to the survival of independent physician practices.

We're seeing evidence of that change in new purchaser coalitions and in new health care reform initiatives from the Legislature. In each case, the rallying cry is health care reform with emphasis on controlling cost and quality.

These changes leave practitioners searching for survival strategies, defined by the Minnesota Medical Association's own special report (Minnesota Medicine September) as "new skills, organizational structures and management systems."

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MMA Awards Physicians at Annual Meeting

The Minnesota Medical Association honored several physicians September 24 at its Awards Brunch held at the MMA's 139th Annual Meeting. Donald C. Bell, M.D., was awarded the Distinguished Service Award, the association's highest honor, for his years of leadership and service in the MMA and for his outstanding contributions to medicine. Bell, who is terminally ill, practiced internal medicine in Edina.

Raymond G. Christensen, M.D., Roger A. MacDonald, M.D., and David J. Olson, M.D., received Physician Awards for Community Service, which honor physicians who have performed outstanding service to their communities in addition to their practice of medicine. Christensen, who has been a family practitioner in Moose Lake, Minnesota, for 17 years, is the medical adviser to the Minnesota Department of Health and rural health consultant and associate professor in the Department of Family Practice and Community Health at the University of Minnesota Medical School. He is also a preceptor for the University of Minnesota-Duluth's rural health training program and for the Rural Physician Associate Program (RPAP) through the university's Minneapolis campus.

MacDonald, a retired family physician, lives in Grand Marais, where he practiced for 10 years following 14 years of general practice in Littlefork, Minnesota.

Olson has served as medical director of the Uptown Community

Clinic in Minneapolis for the past 17 years, while at the same time practicing at Southdale Obstetric & Gynecologic Consultants, P.A., in Minneapolis.

Four physicians received the MMA's President's Award in recognition of their outstanding contributions to the medical profession through service to the MMA: John W. LaBree, M.D., an internal medicine physician and director of Medical Outreach at the University of Minnesota Hospital and Clinics; Robert J. Cumming, M.D., a family physician in St. Cloud; Richard Engwall, M.D., an anesthesiologist from Minnetonka; and Edmund C. Burke, M.D., a retired pediatrician from the Mayo Clinic and *Minnesota Medicine's* editor-in-chief.

The MMA presented the James H. Sova Memorial Award to Terry Hill, who has a distinguished record of achievement in preserving and improving access to health care in rural Minnesota. The award is given to a person, not of the medical profession, who has made a significant contribution to the advancement of medical sciences, medical education, medical care, or the socioeconomics of medical practice. Hill has been executive director of the Northern Lakes Health Care Consortium since its inception in 1985. The James H. Sova Memorial Award was first given in 1982 in memory of James Sova, the chief lobbyist for the MMA from 1968 until his death in 1981.

The MMA presented the Physician Communicator Award to Paul Quie, M.D., who for five years has been the host of "Health Talk and You," a half-hour health education program televised on Minnesota Public Television, KTCA and KTCI. Quie is a pediatrician at the University of Minnesota Hospital and Clinic. The award is given to MMA

members who demonstrate exemplary skills in communicating with the public.

This year, the MMA presented a special communications award to Thomas A. Stolee, M.D., who has just completed his one-year term as MMA president. He received the award in recognition of his extraordinary efforts to communicate with the media and MMA members by visiting reporters at newspapers and television and radio stations throughout Minnesota in addition to meeting with every county medical society in the state. Stolee is a pathologist at Miller-Dwan Hospital in Duluth.

West Suburban Health Campus Board Named

Abbott Northwestern Hospital and North Memorial Medical Center have named the board of directors for the West Suburban Health Campus they are developing in Plymouth as a joint venture. The board members are Robert K. Spinner, president, Abbott Northwestern; David W. Cress, executive vice president, North Memorial; Steven G. Hillestad, senior vice president, marketing, LifeSpan; Patrick Boran, vice president, financial services, North Memorial; Morris M. Sherman, Abbott Northwestern board member and partner, Leonard, Street and Deinard; Ken Sheehan, North Memorial board member and president, Marquette Bank Northeast; Cecil H. Challey, M.D., gastroenterologist, Digestive Healthcare, and medical staff member, Abbott Northwestern; and Fred Walker, M.D., internist, North Clinic, and medical staff member, North Memorial. Cress and Hillestad together form the executive committee; Cress is chair of the board.

USP Advisory Panel on Otorhinolaryngology

The United States Pharmacopeial Convention, Inc., (USP) has appointed two Minnesota physicians to its new advisory panel of experts in the field of otorhinolaryngology to work in its drug information development programs. The Minnesota members are David B. Hom, M.D., from the Department of Otolaryngology, Hennepin County Medical Center, and Lawrence Marentette, M.D., assistant professor in the Department of Otolaryngology and co-director at the Center for Craniofacial/Skull Base Surgery, University of Minnesota, and senior associate physician, Hennepin County Medical Center.

The advisory panel is one of 33 expert panels that contribute to the USP DI® database. During its 1990-95 term, the panel will help determine the content of the database and provide input relating to the clinical aspects of USP's work in the area of drug standards and information.

Man Who Received Baboon Liver Dies

The 35-year-old man who received the first baboon liver transplant June 28 at the University of Pittsburgh Medical Center died in September when a blood vessel burst in his brain. His death apparently was unrelated to the transplant, and an autopsy indicated no signs that the liver failed.

The transplanted liver worked nearly as well as a human organ for the 71 days until his death, a positive sign for more such transplants, said the man's physicians.

Places

FDA Requires 'U' to Stop Selling Transplant Drug ALG

The U.S. Food and Drug Administration told the University of Minnesota to stop selling ALG, a transplant drug, after it found the university's surgery department

had violated federal regulations in its manufacture and sale of the drug, reported the Minneapolis-based *Star Tribune* in a copyright article August 23. John Najarian, M.D., head of the university's surgery department, sent a letter to transplant centers August 14 warning them not to start any new patients on the drug because of new concerns about side effects. He said a recent review had revealed six serious reactions in the past four years and said the university and FDA had agreed to stop selling the drug until "further evaluation," according to the *Star Tribune* article. He also announced a recall of one lot of the drug because of possible bacterial contamination due to leaky vials.

Najarian strongly defended the drug's safety and effectiveness, saying it has been proven safe over two decades. He said the FDA investigation was fair, and the rule violations cited by the FDA were primarily record-keeping problems that the university is rectifying.

The university and other transplant centers in the nation have used ALG since 1970, but it is still classified as an "investigational new drug," and hospitals are required to keep elaborate records on its use. The FDA report said the university failed to maintain copies of many required records and failed to file required annual reports for 1990 and 1991 on the overall research program.

Health One, LifeSpan Merger Cleared

Health One and LifeSpan have settled their lawsuit with Minnesota Attorney General Hubert Humphrey III and can now proceed with their planned merger. The settlement authorizes the merger but requires that the commissioner of health review it under the Minnesota Health Right Act after the act's guidelines are developed. The companies expect the review to occur in the next 18 to 24 months.

Humphrey says he still believes the merger could make health care

more expensive and less accessible, but the companies say the merger will help their hospitals avoid duplication and become more efficient, thus making it possible to provide high-quality health care at a lower cost. Humphrey sued in June because he believed the merger would decrease competition in the Twin Cities.

Under the settlement, the two companies have agreed to a revenue freeze in 1993 and a \$12 million reduction in revenue after that, until Health Commissioner Marlene Marschall decides whether to approve the merger. If she doesn't approve it, the companies must break up the merger.

The companies announced in September the appointments of top board and executive officer positions of the new health care system. Stanley R. Cowle, current chair of the board for Health One, will become chair of the board for the new company; Conley Brooks, current chair of the board for LifeSpan, will serve as vice chair of the board and chair of the executive committee; Gordon M. Sprenger, current president and chief executive officer of LifeSpan, will become chief executive officer; and Donald C. Wegmiller, current president and chief executive officer of Health One, will become vice chair and president. The companies expect the merger to be complete around November 1, 1992.

Socioeconomics

Group Health, MedCenters Finalize Affiliation

The boards of directors of Group Health, Inc., and MedCenters Health Plan have voted to approve the affiliation of the two health plans, creating a new organization that represents a membership of more than 550,000 effective August 18. A new holding company now manages and markets both

health plans. The holding company also will create new products that will allow purchasers to use the care delivery systems of both health plans through one administrative entity, according to James L. Evans, chair of the new holding company board of directors and retired partner with KPMG Peat Marwick. The boards voted in favor of the affiliation after receiving approval from the federal Justice Department, which is responsible for reviewing new relationships that present antitrust issues.

Blue Cross, Medica Cooperate in Cost-cutting Project

Blue Cross and Blue Shield of Minnesota and Medica have been selected to participate in a health care reform initiative intended to simplify claims submission procedures for Minnesota physicians and hospitals and reduce the amount spent on health care administration. The two plans will link computer networks used for patient claims submission as part of a six-month demonstration project developed in cooperation with the Workgroup for Electronic Data Interchange, an advisory committee established as the result of the national health care summit convened last year by Louis Sullivan, M.D., U.S. secretary of health and human services. The goal is to promote the routine use of electronic claims submission systems among health plans nationwide by year end 1994.

"By using electronic methods to submit claims on a national level, we could reduce health care spending by as much as \$10 billion annually," said Sullivan. "Minnesota was selected as the site for this project because it is widely regarded as one of the nation's most progressive health care marketplaces."

Health Center Closing

Golden Valley Health Center announced in August that it would close its doors by the end of September.

In 1988, a group of investors and managers from CompCare, a California operator of chemical dependency treatment centers, purchased the hospital with a \$15 million loan from Sanwa Business Credit Corp., a subsidiary of a Chicago bank. When the hospital's owners missed four straight \$110,000 monthly payments and an anticipated sale of the hospital fell through, Sanwa petitioned for receivership.

The hospital has suffered because of the trend toward providing chemical dependency and mental health treatment in outpatient clinics rather than in the more expensive overnight hospitals. Jeff Pauley, the hospital's marketing director, said he does not know what Sanwa plans to do with the property.

Medica Patients Get Free Rides

Medica is offering free round-trip transportation to doctor and dentist appointments for its 45,000 Medicaid patients in Hennepin and Dakota counties. According to Maria Verven, Medica's spokesperson, the no-show rate for appointments had been running about 40 percent with Medicaid patients. The plan hopes its "Provide a Ride" program will help patients make their appointments and encourage them to get preventive care.

The program includes vouchers for MTC buses, a taxi service, and vans from Doctors Transport Service. It is being financed by \$300,000 from Medica and a subsidy from the Minnesota Department of Human Services.

Medica Medicaid members can arrange transportation by calling 612/936-9583 from 8 a.m. to 4 p.m. Monday through Friday.

Innovations

Medtronic Offers New Drug/Pump

Minneapolis-based Medtronic, Inc., announced August 25 that the U.S. Food and Drug Administration has authorized commercial

distribution of Lioresal® Intrathecal (baclofen injection) for use intrathecally in implantable drug pumps to treat severe spasticity of spinal cord origin in patients with multiple sclerosis or spinal cord injury. The Medtronic Synchro-Med® implantable pump also was cleared for use in delivering Lioresal Intrathecal as a new treatment alternative for patients who are insufficiently helped or experience intolerable side effects from oral baclofen.

Blood Test Detects Recurrent Cancer

A simple blood test may help detect recurrences of skin and other cancers in early stages and residual disease after treatment, said scientists at the John Wayne Cancer Institute. The test analyzes blood for a molecule shed from the surface of cancer cells. Researchers said it's too early to know if the test can be used to screen healthy people for cancer.

The research, which spanned 20 years, was reported in the *Journal of Clinical Laboratory Analysis* in August. Sixty-nine percent of the patients who eventually redeveloped the disease tested positive for the molecule before recurring cancer was diagnosed. About 10 percent to 15 percent of those who tested positive didn't have a recurrence after 10 years.

Hepatitis A Vaccine Successful

A new vaccine against hepatitis A completely prevented spread of the disease in a study involving 1,037 children in the Kiryas Joel community in Monroe, New York, a community of Hasidic Jews that is plagued with hepatitis A infections. Half the children were given the vaccine, and half were given a placebo. None of those vaccinated got hepatitis A, but 34 of those who received the placebo developed it.

Merck Sharp & Dohme Research Laboratories, the drug's manufacturer, hopes to have

approval from the U.S. Food and Drug Administration to market the vaccine in 1994.

Test Developed to Detect Alzheimer's

Scientists have developed a test that appears to detect the early stages of Alzheimer's disease, according to a report in the August 22 *Lancet* by researchers at SIBIA Inc., a San Diego-based biotechnology offshoot of the Salk Institute. The researchers studied an Indiana family with hereditary Alzheimer's and correctly identified members of the family who carry the gene that produces the disorder. The test showed that one family member with no apparent symptoms would develop the disease, and a neurological exam confirmed the diagnosis.

Alzheimer's centers around the world are now conducting studies on the test. If the test is successful, the company will begin marketing it next year.

Medical Research

Rural Minnesota Babies Test Positive in Drug Screening

Drug screening of almost 1,000 new mothers and their babies in rural Minnesota found that nearly 4 percent tested positive, and almost 25 percent of the new mothers admitted that they continued to smoke during their pregnancies, according to a study published in the first issue of the *Archives of Family Medicine*.

Author Barbara Yawn, M.D., of the Olmsted Medical Group and the Department of Family Health and Medicine, University of Minnesota, and colleagues write, "Cocaine use and cigarette smoking are associated with similar high numbers of potential complications for the fetus and newborn, including spontaneous abortion, preterm labor, intrauterine growth retardation, placental abruption, and intrauterine fetal death."

The study notes that widespread substance abuse during pregnancy by urban women has

been reported repeatedly, but few studies have examined the possible geographic variation of drug use during pregnancy.

For the study, the researchers took maternal urine and newborn meconium samples from 956 mother-newborn pairs in four rural Minnesota hospitals. The participating hospitals are located in distinct geographic regions of the state in towns of 8,000 to 15,000 people and range in size from 66 to 140 beds. All are more than 50 miles from any city of more than 30,000 people.

Blood Pressure Drugs Help Heart-Attack Patients

Captopril and enalapril, drugs typically used to treat high blood pressure, help prevent future heart attacks and prolong survival in heart-attack patients, according to researchers at the Mayo Clinic and the University of Minnesota. Two separate studies were published in the September 3 *New England Journal of Medicine*.

The Mayo Clinic was one of 45 medical centers and 112 hospitals that participated in the five-year study of captopril. The study, which included more than 2,000 people throughout the United States and Canada, reports that using the drug within three to 16 days after heart attack reduced the mortality rate in heart-attack patients by 19 percent and the rate of subsequent heart attacks by 25 percent. The study findings also demonstrate that captopril can reduce the deterioration of cardiac function and hospitalizations for congestive heart failure.

The University of Minnesota study, which involved patients at 83 hospitals linked to 23 medical centers in the United States, Canada, and Belgium, found that although overall mortality rates dropped only slightly with use of enalapril, hospitalization for heart failure dropped 36 percent and deaths caused by progressive heart failure declined by 21 percent.

Mayo Shows Laparoscopic Surgery Good for Children

Mayo pediatric surgeons have shown that pediatric laparoscopic cholecystectomies can be done without complication and as quickly as open surgery for gallstones, according to a study published in the August issue of the *Journal of Pediatric Surgery*.

The study followed six children who had gallstones and were referred to Mayo Clinic between December 1990 and August 1991. After laparoscopic cholecystectomy, all six were symptom-free and had returned to normal activities within four days of surgery, including playing baseball, shoveling snow, and attending school.

AIDS Update

CDC Recommends Routine HIV Testing at Some Hospitals

An estimated 225,000 HIV-infected patients were cared for in U.S. hospitals in 1990, according to a Centers for Disease Control study published in the August 13 *New England Journal of Medicine*. The CDC recommends that routine but voluntary testing at certain U.S. hospitals with a higher prevalence of the disease might identify more than 100,000 people who have the virus but don't know it.

Just five hospitals had lower infection rates than St. Paul-Ramsey Medical Center, one of 20 hospitals in the study. A hospital in New York City led the list with a rate 12 times higher than St. Paul-Ramsey's.

The researchers suggest that routine voluntary testing include patients aged 15 to 54 at hospitals with one or more newly diagnosed AIDS case for each 1,000 discharges. This would include only a few hospitals in Minnesota. The CDC believes that as many as 110,000 people with unsuspected infections could be identified the first year, with a smaller, unknown number after that. The CDC said hospitals should consider the testing, but it is not an official recommendation.

The study found that 9,286 of

195,829 blood samples (4.7 percent) anonymously checked were positive for HIV. No names were kept for those whose blood was checked. The infection rates ranged from two-tenths of 1

percent at hospitals in Salt Lake City and Omaha, Nebraska, to 14.2 percent at a hospital in New York City's Bronx borough. St. Paul-Ramsey's rate was 1.2 percent.

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A Calendar of Continuing Medical Education Courses

Provided through the MMA Medical Education Subcommittee on CME Resources. For assistance with scheduling meetings or for information on future medical meetings and CME courses, please contact the MMA office: 2221 University Avenue SE, Suite 400, Minneapolis, Minnesota 55414; 612/378-1875. Information for each entry is arranged by date; name of program; primary sponsor; location; contact person.

OCTOBER 1992

Oct. 5-9 Safety and Health Training for Hazardous Waste Site Personnel (24- and 40-Hour Training) Midwest Center for Occupational Health & Safety; Earle Brown Continuing Education Center, St. Paul, MN. CONTACT: Registrar, Continuing Education, Midwest Center for Occupational Health & Safety, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

Oct. 8 Safety and Health Training for Hazardous Waste Site Personnel (Eight-Hour Refresher) Midwest Center for Occupational Health & Safety; Earle Brown Continuing Education Center, St. Paul, MN. CONTACT: Registrar, Continuing Education, Midwest Center for Occupational Health & Safety, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

Oct. 8-9 Annual Forensic Science Seminar Hennepin County Medical Center; Hennepin County Medical Center, Minneapolis, MN. CONTACT: Dr. Garry Peterson, 701 Park Avenue, Mailcode 811, Minneapolis, MN 55415-1829; 612/347-2125.

Oct. 8-24 China/Yangtze River Adventure North Central Medical Conference; Beijing, Chongqing, Yangtze River/Three Gorges, Xian, Shanghai, Hong Kong. CONTACT: North Central Medical Conference, 1845 Hampshire Avenue, Suite 200, St. Paul, MN 55116; 612/698-1888.

Oct. 9 Current Clinical Cardiology for Physicians & the 11th Annual Jesse E. Edwards, M.D., Lecture St. Paul Health Clinic/Health One Corporation; United/Children's Conference Center, St. Paul, MN. CONTACT: Eleanor Waldrup, 333 North Smith, St. Paul, MN 55102; 612/220-8558 or 800/343-DOCS.

Oct. 9 Annual Contemporary Issues in Dialysis Therapy Hennepin County Medical Center; Sheraton Midway Hotel, St. Paul, MN. CONTACT: Ann Samways, 701 Park Avenue, Mailcode 867A, Minneapolis, MN 55415-1829; 612/347-2075.

Oct. 9 Health Care Access: A Matter of Justice St. Paul-Ramsey Medical Center; Holiday Inn East, St. Paul, MN. CONTACT: Office of CME, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

Oct. 9 Adolescent Medicine and Health Care Office of Continuing Medical Education, University of Minnesota Medical School; Park Inn International, Minneapolis, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Oct. 9-10 University of Minnesota Weekend Update: Oncology, Cardiology Office of Continuing Medical Education, University of Minnesota Medical School; St. James Hotel, Red Wing, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Oct. 14-16 Internal Medicine Review Office of Continuing Medical Education, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Oct. 15-16 Primary Care Treatment for Pressure Sores Hennepin County Medical Center; Hennepin County Medical Center, Minneapolis, MN. CONTACT: Ann Samways, 701 Park Avenue, Mailcode 867A, Minneapolis, MN 55415-1829; 612/347-2075.

Oct. 15-16 Trauma and Critical Care Conference Hennepin County Medical Center; Radisson Hotel and Conference Center, Plymouth, MN. CONTACT: Julie S. Peck, 701 Park Avenue, Mailcode 967A, Minneapolis, MN 55415-1829; 612/347-2075.

Oct. 16 Anxiety: The Interface Between Biology & Behavior St. Paul-Ramsey Medical Center, Anxiety Disorders Clinic and Office of CME; Holiday Inn East, St. Paul, MN. CONTACT: Office of CME, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

Oct. 19-20 Advanced Trauma Life Support (ATLS) Health One Corporation; United/Children's Conference Center, St. Paul, MN. CONTACT: Sue Hance, Health One Medical Education, 2810 57th Avenue North, Minneapolis, MN 55430; 612/574-7895 or 800/343-DOCS.

Oct. 22-23 23rd Annual Autumn Seminar: Obstetrics and Gynecology and Women's Cancer Symposium Office of Continuing Medical Education, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Oct. 22-23 Pulmonary Function Testing Workshop St. Paul-Ramsey Medical Center; St. Paul-Ramsey Medical Center, St. Paul, MN. CONTACT: Office of CME, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

Oct. 22-24 **27th Annual Orthopedic and Trauma Seminar** Hennepin County Medical Center; Hennepin County Medical Center, Minneapolis, MN. CONTACT: Carol Quinlivan, 701 Park Avenue, Mailcode 860, Minneapolis, MN 55415-1829; 612/366-6600.

Oct. 22-24 **Teaching the Medical Interview** Hennepin County Medical Center; Hennepin County Medical Center, Minneapolis, MN. CONTACT: Celia Poehls, 701 Park Avenue, Mailcode 867A, Minneapolis, MN 55415-1829; 612/347-2075.

Oct. 23 **Lyme Borreliosis Symposium** Abbott Northwestern Hospital, Minnesota Institute of Public Health, Lyme Disease Coalition of Minnesota; Airport Hilton, Minneapolis, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

Oct. 23-24 **Pelviscopic Surgery Including Laparoscopic Hysterectomy** Laser Center of Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Laser Center 39102, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-3000.

Oct. 23-24 **Fifth Annual New Ulm Fall Seminar** Sioux Valley Hospital/Health One Corporation; Holiday Inn, New Ulm, MN. CONTACT: Sue Hance, Health One Medical Education, 2810 57th Avenue North, Minneapolis, MN 55430; 612/574-7895 or 800/343-DOCS.

Oct. 23-24 **Conference for Directors of Medical Education** Minnesota Medical Association; Marriott Hotel, Bloomington, MN. CONTACT: Jane Phillip, Minnesota Medical Association, 2221 University Avenue SE, #400, Minneapolis, MN 55414; 612/378-1875 or 800/999-1875.

Oct. 25 **The Individualized Management of Hyperlipoproteinemia** Mayo Clinic/Mayo Foundation; Mayo Foundation, Rochester, MN. CONTACT: Rita Kunz or Jan Fleck, Postgraduate Courses, Section of CME, Siebens 5, Mayo Foundation, 200 1st Street SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

Oct. 25 **Update on Sleep Disorders** Mayo Clinic/Mayo Foundation; Mayo Foundation, Rochester, MN. CONTACT: Rita Kunz or Jan Fleck, Postgraduate Courses, Section of CME, Siebens 5, Mayo Foundation, 200 1st Street SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

Oct. 29-30 **Trauma Management for Primary Care Providers** St. Paul-Ramsey Medical Center; Holiday Inn East, St. Paul, MN. CONTACT: Office of CME, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

Oct. 30 **Health Care Objectives for the Year 2000** Hennepin County Medical Center; Hennepin County Medical Center, Minneapolis, MN. CONTACT: Robin Hoppenrath, 701 Park Avenue, Mailcode 867A, Minneapolis, MN 55415-1829; 612/347-2075.

Oct. 30-31 **Cutaneous Laser Surgery** Abbott Northwestern Hospital, Laser Education Center; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

Oct. 30-31 **Sexual Counseling: New Directions and Methods** Mayo Foundation; Mayo Foundation, Rochester, MN. CONTACT: Rita Kunz or Jan Fleck, Postgraduate Courses, Section of CME, Siebens 5, Mayo Foundation, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

NOVEMBER 1992

Nov. 5-6 **Medical Intensive Care Conference** Hennepin County Medical Center; Hennepin County Medical Center, Minneapolis, MN. CONTACT: Julie Peck, 701 Park Avenue, Mailcode 867A, Minneapolis, MN 55415-1829; 612/347-2075.

Nov. 6 **Thrombolytic Therapy in Acute MI** Abbott Northwestern Hospital; Minneapolis Heart Institute, Minneapolis, MN. CONTACT: Minneapolis Heart Institute Foundation, 920 East 28th Street, Minneapolis, MN 55407; 612/863-3979.

Nov. 6 **17th E. T. Bell Fall Pathology Symposium** Office of Continuing Medical Education, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Nov. 6 **Prostate Seed Implantation: A Practical Course** Abbott Northwestern Hospital and Teknar; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

Nov. 6-7 **Front Line Neurology: Primary Care Management of Patients with Neurologic Problems** Abbott Northwestern Hospital and Minneapolis Neuroscience Institute; Marriott City Center, Minneapolis, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

Nov. 7 **Fourth Annual Oncology Conference** Health One Corporation; Radisson Ridgedale, Minneapolis, MN. CONTACT: Sue Hance, Health One Medical Education, 2810 57th Avenue North, Minneapolis, MN 55430; 612/574-7895 or 800/343-DOCS.

Nov. 7-8 **Update in Cardiovascular Disease** Mayo Clinic/Mayo Foundation; Mayo Foundation, Rochester, MN. CONTACT: Rita Kunz or Jan Fleck, Postgraduate Courses, Section of CME, Siebens 5, Mayo Foundation, 200 1st Street SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

Nov. 12-13 **Gynecologic Clinical Reviews 1992** Mayo Clinic/Mayo Foundation; Leighton Auditorium, Mayo Foundation, Rochester, MN. Contact: Rita Kunz or Jan Fleck, Postgraduate Courses, Section of CME, Siebens 5,

Mayo Foundation, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

Nov. 12-13 **Pediatric Advanced Life Support** Minneapolis Children's Medical Center; Minneapolis Children's Medical Center, Minneapolis, MN. CONTACT: Kathy Ingerson, 2525 Chicago Avenue South, Minneapolis, MN 55404; 612/863-5884.

Nov. 12-14 **Strategies in Primary Care Medicine** St. Paul-Ramsey Medical Center; Holiday Inn East, St. Paul, MN. CONTACT: Office of CME, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

Nov. 13-14 **Lasers in Orthopedic Surgery** Laser Center of Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Laser Center 39102, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

Nov. 13-14 **Update on Inflammatory Bowel Disease** Mayo Clinic/Mayo Foundation; Mayo Foundation, Rochester, MN. CONTACT: Rita Kunz or Jan Fleck, Postgraduate Courses, Section of CME, Siebens 5, Mayo Foundation, 200 1st Street SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

Nov. 14 **Topics in Pediatric Emergency Medicine** Minneapolis Children's Medical Center; Minneapolis Children's Medical Center, Minneapolis, MN. CONTACT: Kathy Ingerson, Minneapolis Children's Medical Center, 2525

Chicago Avenue South, Minneapolis, MN 55404; 612/863-5884.

Nov. 14-15 **Monitoring Neural Function During Surgery** Mayo Foundation; Mayo Foundation, Rochester, MN. CONTACT: Rita Kunz or Jan Fleck, Postgraduate Courses, Section of CME, Siebens 5, Mayo Foundation, 200 1st Street SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

Nov. 19-21 **Diabetes Nutrition Symposium: "Nutrition and Diabetes—From Theory to Practice"** International Diabetes Center; International Diabetes Center, Minneapolis, MN. CONTACT: Cindy Poppitz, International Diabetes Center, 5000 West 39th Street, Minneapolis, MN 55416; 612/927-3393.

Nov. 20 **Primary Care Update/Sports Medicine** Hennepin County Medical Center; Hennepin County Medical Center, Pillsbury Auditorium, Minneapolis, MN. CONTACT: Ann Samways, 701 Park Avenue, Mailcode 867A, Minneapolis, MN 55415-1829; 612/347-2075.

Nov. 20 **Ramsey Research Conference** St. Paul-Ramsey Medical Center; St. Paul-Ramsey Medical Center, St. Paul, MN. CONTACT: Office of CME, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

Nov. 20-21 **Primary Care Update VI** Methodist Hospital Medical; Radisson Hotel and Conference Center, Plymouth, MN. CONTACT: Jan Stalpes, Methodist Hospital, Medi-

CONTINUING MEDICAL EDUCATION

ST. PAUL-RAMSEY MEDICAL CENTER

Fall-Spring Conference Schedule

Mark your calendar now for these upcoming conferences:

1992

- October 9 Health Care Access: A Matter of Justice, St. Paul
- October 16 Anxiety: The Interface Between Biology & Behavior, Minneapolis
- October 29-30 Trauma Management for Primary Care Providers, St. Paul
- November 12-14 Strategies in Primary Care Medicine, St. Paul
- November 20 Ramsey Research Conference, St. Paul
- December 3-5 Cardiopulmonary Medicine, St. Paul

1993

- February 19 Burn Care Today, St. Paul
- March 11-12 Family Medicine Today, St. Paul
- March 19 Occupational Medicine Update, Minneapolis
- March 25-26 Critical Care 1993: Practical Approaches & Case Discussions, St. Paul
- April 1-2 Ob/Gyn Update, St. Paul
- April 2 ENT Update for Primary Care Physicians, St. Paul
- April 16 Domestic Violence: Healing the Family

Information and Registration:

Continuing Medical Education, St. Paul-Ramsey Medical Center,
640 Jackson Street, St. Paul, MN 55101; Phone 612/221-3992

CME

640 Jackson Street
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RAMSEY

Health One Medical Education and Research

October 9

**Insights and Outlooks '92 and
the 11th Annual Jesse E.
Edwards, MD, Lecture**

United/Children's Conference Center
St. Paul, MN

October 16 & 17

**Advanced Life Support in
Obstetrics (ALSO) Course**

United/Children's Conference Ctr., St. Paul
(7:30am - 5:00pm)

October 19 & 20

**Advanced Trauma Life
Support (ATLS™) Course**

United/Children's Conference Ctr., St. Paul
(7:30am - 5:00pm)

October 23 & 24

**Fifth Annual New Ulm
Fall Seminar**

Holiday Inn, New Ulm, MN

November 14

**Breast Cancer: New Frontiers in
in Diagnosis**

United/Children's Conference Ctr., St. Paul
7:30 am - 12:10pm

For further information contact the
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cal Staff Office, PO Box 650, Minneapolis, MN 55440;
612/932-5135.

Nov. 21 **Case Studies in Otorhinolaryngology: Head & Neck Surgery** Mayo Clinic/Mayo Foundation; Mayo Foundation, Rochester, MN. CONTACT: Rita Kunz or Jan Fleck, Postgraduate Courses, Section of CME, Siebens 5, Mayo Foundation, 200 1st Street SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

DECEMBER 1992

Dec. 3-5 **Annual Cardiopulmonary Medicine Update** St. Paul-Ramsey Medical Center; Holiday Inn East, St. Paul, MN. CONTACT: Office of CME, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

Dec. 3-5 **Managing Mortality: Ethics, Euthanasia, and the Termination of Medical Treatment** The Center for Biomedical Ethics, University of Minnesota, with the support of the FHP Foundation; University of Minnesota, Minneapolis, MN. CONTACT: Managing Mortality Conference, Center for Biomedical Ethics, 420 Delaware Street SE, Box 33 UMHC, Minneapolis, MN 55455; 612/688-6570.

Dec. 4-5 **Children with Brain Injuries: Can We Make a Difference?** Gillette Children's Hospital, HCMC, and Minnesota Head Injury Association; Sheraton Midway Hotel, St. Paul, MN. CONTACT: Office of Academic Affairs, Hennepin County Medical Center, 701 Park Avenue, Suite 4512, Minneapolis, MN 55415; 612/347-3533.

JANUARY 1993

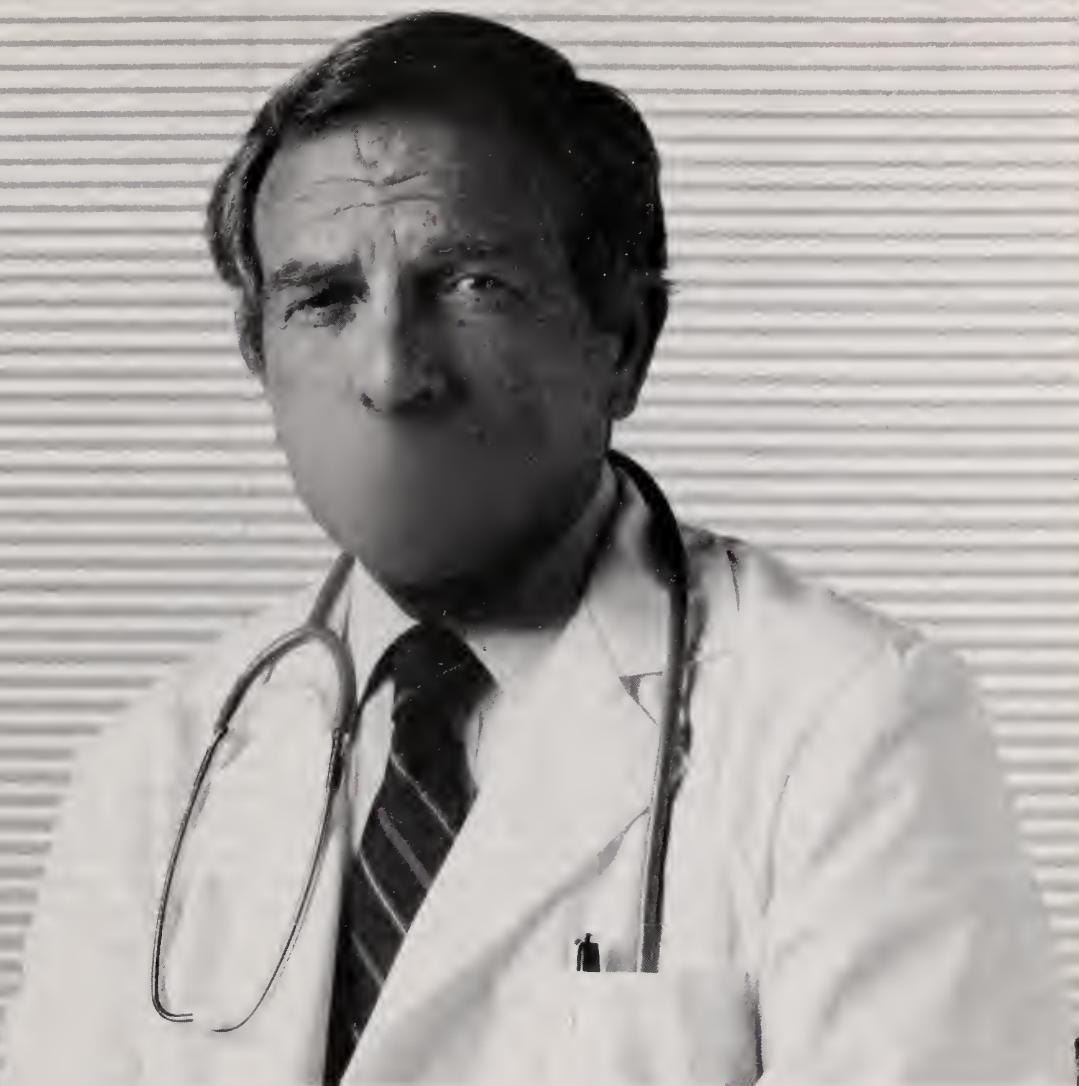
Jan. 21-22 **Pulmonary Function Testing Workshop** St. Paul-Ramsey Medical Center; St. Paul-Ramsey Medical Center, St. Paul, MN. CONTACT: Office of CME, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

Jan. 22-23 **Advanced Laparoscopic Abdominal Surgery** Abbott Northwestern Hospital, Laser Education Center; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME-14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

FEBRUARY 1993

Feb. 5-6 **Advanced Gastrointestinal Tract Surgery** Abbott Northwestern Hospital, Laser Education Center; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME-14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

Feb. 12 **Genetics for Practicing Physicians** Office of Continuing Medical Education, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.



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Healthcare Resource Group works with clients seeking additional physician associates for practices both locally and nationally. Physicians who work with us know that confidentiality is respected and their CVs are not advanced without personal approval. This personal and professional approach has provided valuable assistance to both clients and candidates seeking relocation or an alternative professional affiliation. For further information, please send your CV or call Liz Johnson, Healthcare Resource Group, 9072 Preserve Blvd., Eden Prairie, MN 55347; 612/828-6890.

(6/92-R)

Internist to join a progressive 13-physician group practice. Rural college town 30 miles from St. Paul, Minnesota. New clinic and constructing new hospital. Contact: Robert B. Johnson, M.D., River Falls, WI 54022; 715/425-6701.

(*9/91-R)

Mankato: FP partner to join four board-certified family physicians, ages 34-43, in fast-growing, full-range practice. ob optional. Population 40,000+. Seventy miles to Twin Cities. Four colleges nearby. Subspecialty consultation readily available on hospital staff. Academic appointment available. Call: Tony Giefer, M.D., 507/387-8231. (8/91-R)

Family Physicians: Well-established south suburban Minneapolis family practice group seeks associates part/full time to staff day clinic. Excellent call schedule, salary, and fringe benefits. Also seeking locum tenens to staff PT/FT Urgent Care Centers and/or day clinic. Contact: Administration, Family Physicians, P.A., 612/435-4125, or send inquiries to Suite 100, 14050 Nicollet Avenue South, Burnsville, MN 55337.

(*9/89-R)

Mankato Clinic, Ltd. is seeking BC/BE physicians in the following specialties: invasive cardiology, oncology/hematology, pulmonary medicine, general surgery, gastroenterology, family practice, and general internal medicine. The Mankato Clinic is a 53-physician multispecialty group

practice in south-central Minnesota with a trade-area population of +250,000. Guaranteed salary first year, incentive thereafter with full range of benefits and liberal time off. For more information call: Dr. B. C. McGregor, President, or Roger Greenwald, Executive Vice President, 507/625-1811 or write: 501 Holly Lane, Mankato, MN 56001.

(12/91-R)

BC/BE Internal Medicine and Ob/Gyn Physician: Excellent opportunity to join a well-established, progressive, 26-physician multispecialty group located in an economically sound community of 22,000 (drawing area of 45,000), 65 miles south of the Twin Cities. Full membership after one year. Competitive salary and fringe benefits package. Contact: Craig Oien, M.D., or Terry Tone, Administrator, 134 Southview, Owatonna, MN 55060; 507/451-1120.

(9/92-R)

Forest Lake Doctor's Clinic is seeking a BC/BE family physician, pediatrician, ob/gyn, and internist to join 10-physician multispecialty group. Located 25 miles north of Minneapolis-St. Paul in progressive community with excellent schools, many beautiful lakes, recreational activities, golf, fishing, boating, skiing. Local hospital directly across street. Contact: Dr. Harvey J. Frank or Dr. Doug Sill, 121 SE 11th Avenue, Forest Lake, MN 55025; 612/464-7100.

(4/90-R)

MDsearch assists medical groups and hospitals in their recruiting efforts. For confidential information on opportunities in the Upper Midwest, send CV and/or call collect: Mary Jo Cordes, MDsearch, PO Box 21507, St. Paul, MN 55121; 612/454-7291.

(12/91-R)

Lake City, Minnesota: Family physician BC/BE needed to join three other FPs in progressive, growing practice on Lake Pepin/Mississippi River in southeastern Minnesota. Excellent first-year salary/benefits in a scenic community with multiple recreational opportunities. Contact: D.D. Pflaum, M.D., 303 South Washington, Lake City, MN; 612/345-3318.

(8/90-R)

Olmsted Medical Group is seeking BC/BE physicians in the following specialties: orthopedics, radiology, family practice, emergency medicine, and ob/gyn. Great opportunity for well-trained physicians to join a 55+ physician multispecialty group in a dynamic, progressive practice. In addition to the main office in Rochester, the group operates eight branch offices in southeastern Minnesota. Excellent salary/benefits package includes malpractice insurance, flexible benefits plan, 401(k) and profit sharing, and relocation assistance. Send CV to: Olmsted Medical Group, Attn: Susan Schuett, 210 Ninth Street SE, Rochester, MN 55904.

(1/92-R)

Downtown Office Space for Rent: Physician in the Medical Arts Building, 825, wishes to sublet to another physician on a part-time basis for the purpose of sharing overhead expenses. Call: 612/370-0553. (6/90-R)

Wisconsin: 120-physician multispecialty clinic in the Fox River Valley of northeastern Wisconsin desires two BC/BE pediatricians to join department of 15 BC/BE pediatricians. Excellent compensation and benefits package, leading to shareholder status after two years. The community offers a superb recreational, cultural, and family environment in which to practice. For information please call or write: Howard Kidd, M.D., La Salle Clinic, 411 Lincoln Street, Neenah, WI 54956; 414/727-4276. (3/91-R)

Family Physician wanted to join three board-certified M.D.s in well-established, expanding group practice. Weekend ER coverage. No buy-in. Financial package hard to beat. Enjoy a progressive, rural city within easy reach of St. Cloud and Minneapolis. Contact: Dr. Jim Mohs, Melrose Clinic, 603 West Main Street, Melrose, MN 56352; office, 612/256-4228; home, 612/256-3488. (4/91-R)

Internal Medicine, Pediatrics, and Dermatology practice opportunities available at the Faribault Clinic. The Faribault Clinic is a multispecialty group practice of 19 physicians. Faribault is located 50 miles south of Minneapolis on I-35. For more information contact: Ray W. Wood, M.D., or Ken Smith, Administrator, 924 NE First Street, Faribault, MN 55021; 507/334-3921. (4/90-R)

bault, MN 55021; 507/334-3921.

(4/90-R)

Stillwater: Multispecialty group with emphasis on primary care seeking BC/BE family physician, pediatrician, and internist. Scenic location with excellent school system, supportive medical community with strong local hospital, competitive salary and benefits. Send CV to: Jon Pedersen, St. Croix Valley Clinic, 921 Greeley, Stillwater, MN 55082; 612/439-2215. (12/92-R)

Pediatrician wanted to join group of five board-certified pediatricians in a well-established, progressive group practice. Located in Minneapolis, minutes away from Children's Medical Center. Small practice stressing patient care and preventive medicine. Contact: Gregg Savitt, M.D., 3145 Hennepin Avenue, Minneapolis, MN 55408. (9/91-R)

Family Physician wanted to join five-physician, two-P.A., two-site family practice group in St. Anthony and Shoreview. Ob available. Competitive salary, benefits package, and call schedule. Contact: Gerald Pitzl, M.D., Silver Lake Clinic PA, 612/788-9251. (7/91-R)

Ideal Internal Medicine Practice: Excellent opportunity for BC/BE internist to establish a prosperous practice. Progressive 107-bed community hospital with a medical staff of 45 physicians and a service-area population of over 45,000. Vibrant Northern Michigan community with all summer

ONCOLOGIST

The St. Cloud Clinic of Internal Medicine, Ltd., has an opening for a medical oncologist. The St. Cloud Clinic of Internal Medicine is a group of 31 internists, including the subspecialties of cardiology, endocrinology, gastroenterology, nephrology, and pulmonary disease. It has three full-time medical oncologists who are active members of NCCTG/ECOG.

The clinic is adjacent and connected to the St. Cloud Hospital, a 330-bed regional medical center overlooking the Mississippi River. A new cancer center building project is underway, which will expand the capabilities of cancer care at the center.

St. Cloud, a city of 65,000, is a rapidly growing area of Minnesota with a medical-drawing population of 175,000. It is in central Minnesota—65 miles northwest of Minneapolis/St. Paul and adjacent to multiple lakes and recreation areas.

For further information about this opportunity, please contact:

Mark J. Murphy, Administrator, or Scott P. Davis, M.D.
St. Cloud Clinic of Internal Medicine, Ltd.
1200 Sixth Avenue North
St. Cloud Minnesota 56303
(800) 458-7272 or (612) 252-5131

Ideal Position- Ideal Community Grand Rapids Minnesota

Young, 12-MD primary-care specialty group seeking to expand with additional FP and internist. Healthy economic base. Great school system. Well-staffed, modernized community hospital. Thirty-five MDs in community. Negotiable, competitive salary and good benefits. Send inquiry to:

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and winter recreational activities. Salary guarantee of \$110,000 with excellent benefits. Send CV or contact: John Schon, Administrator, Dickinson County Hospitals, 400 Woodward Avenue, Iron Mountain, MI 49801; 800/236-3240. *1-10/92

Family Practice: Physicians seeking a BC/BE family practice physician for the Norway, Michigan, service area. The physician would have the option of joining one of the existing practices and/or setting up his/her own practice. Anderson Memorial Hospital is a part of Dickinson County Hospitals and has a service-area population of over 45,000. Contact: Dr. Paul Hayes' office, 906/563-9255, or Dr. William Gladstone's home, 906/563-8743. Anderson Memorial Hospital, Main Street, Norway, MI 49870; 906/563-9243. *1-10/92

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General Surgeon: Five-man family practice group seeks surgeon. Only clinic in city of 8,000, one hour from Minneapolis. Position should generate adequate salary and lots of family time. Please contact James W. Dey, M.D., or Ruth Hawker, Clinic Manager, 501 North State Street, Waseca, MN 56093; 507/835-3110. (5/92-R)

One or Two Family Practice Physicians to join five family practitioners. Population 8,000. One hour south of Burnsville Center. Lakes, industry, negotiable salary. Clinic adjacent to hospital. Ample free time to enjoy family life. Contact James W. Dey, M.D., or Ruth Hawker, Clinic Manager, 501 North State Street, Waseca, MN 56093; 507/835-3110. (5/92-R)

Well-Established Family Practice available in rural northern Minnesota. As busy as you choose to be. Dispensary, small lab, and x-ray in office. New 80-bed regional hospital, well equipped, additional expansion in planning stage. Specialty consultants available. Near Boundary Waters Canoe Area, skiing, fishing, hunting, and clean air. New K-12 school with achievement scores above state and national average. State university, two community colleges, and vo-tech nearby. Write Gordon W. Franklin, M.D., Box 1 South Route, Northome, MN 56661; or call: 218/897-5222 or 218/897-5272 evenings. (5/92-R)

The Morris Medical Center, P.A., is currently seeking a family practitioner to join our multispecialty group. Morris, Minnesota, is a community of 5,500 residents with a four-year liberal arts college. Contact: Mike Flicker,

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Administrator, PO Box 600, Morris, MN 56267; 612/589-3232.
6-12/92

Family Practice, Southwest Iowa—BC/BE: Excellent opportunity for two FPs to join multispecialty clinic in Creston, Iowa. Ob optional, limited call, progressive 83-bed hospital, competitive salary and benefits package in a family-oriented community. Send CV to Mike Brentnall, Administrator, Creston Medical Clinic, P.C., 526 New York Avenue, Creston, Iowa 50801; 515/782-2131. 4-11/92

Internal Medicine, Midwest Bedroom Community: Enjoy a hassle-free, high-income internal medicine practice in a medical community refreshingly free of politics. Located just 25 minutes from a major metropolitan area of 1 million, you will appreciate ready access to pro sports, symphony, and cultural amenities without giving up the benefits of affordable housing, great schools, and small-town values. Substantial hospital-sponsored net guarantee and generous relocating assistance. Send your CV to Bill Sweeney at HKA Midwest Region, 5420 Southern Avenue West, Suite 407, Indianapolis, IN 46241; or call 800/776-7901, Ext. 2-123, and I can share with you the details first hand. You can also fax your CV to my attention at 317/247-8533. Discretion is assured. *3-10/92

Internist: Regional treatment center interested in full-time BC/BE internist. Forty hours/week. Competitive salary and benefits. Live in the exciting Brainerd Lakes area. Send CV to: Chief of Medicine, Brainerd Regional Human Services Center, 1777 Highway 18 East, Brainerd, MN 56401. *6-1/93

Opening—Family Practice: Location: one hour from Twin Cities. Call: one in seven. Group size: six physicians. Salary: \$100,000. Signing bonus: \$20,000. Loan forgiveness: \$50,000/five years. Lake living: choice of two adjacent to our community. Contact: call collect 612/796-6220 (8 a.m. to 10 p.m.). 2-10/92

Internal Medicine, Family Practice, Urgent Care, Ob/Gyn, and Academics: Positions in large metropolitan cities, urban and rural communities with a concentration in the Great Lakes area and Plains States. Whether you prefer a cosmopolitan lifestyle, a city surrounded by nature and the beauty of the four seasons, the peaceful rolling farm country, or perhaps life in historic villages—there is something for everyone. To discuss your practice preferences and these opportunities, please call our toll-free number, 800/243-4353, or send your CV to Strelcheck & Associates, Inc., 10624 North Port Washington Road, Mequon, WI 53092. *3-11/92

Eugene, Oregon: 48-physician multispecialty group is seeking BC/BE family physician. Practice includes ob. Excellent schools. Abundant cultural and recreational opportunities. Near Cascade Mountains and coast. Home of University of Oregon. Please send CV to James Schwering, Oregon Medical Group, PO Box 1648, Eugene, OR 97440; or phone 503/686-3850. *3-11/92

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If Interested In joining a young, growing organization located in beautiful lakes area community, please contact:

Timothy A. Hunt, Administrator
Alexandria Clinic, P.A.
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612 • 763 • 5123

Internal Medicine Physician: BC/BE to join 25-physician multispecialty group in Winona, Minnesota, with existing 10-physician Internal Medicine Department. Total draw of 40,000 population. Competitive salary offered. Interested physicians please contact: J. B. Knuesel, Administrator, Winona Clinic, Ltd., 420 East Sarnia, Winona, MN 55987. 3-11/92

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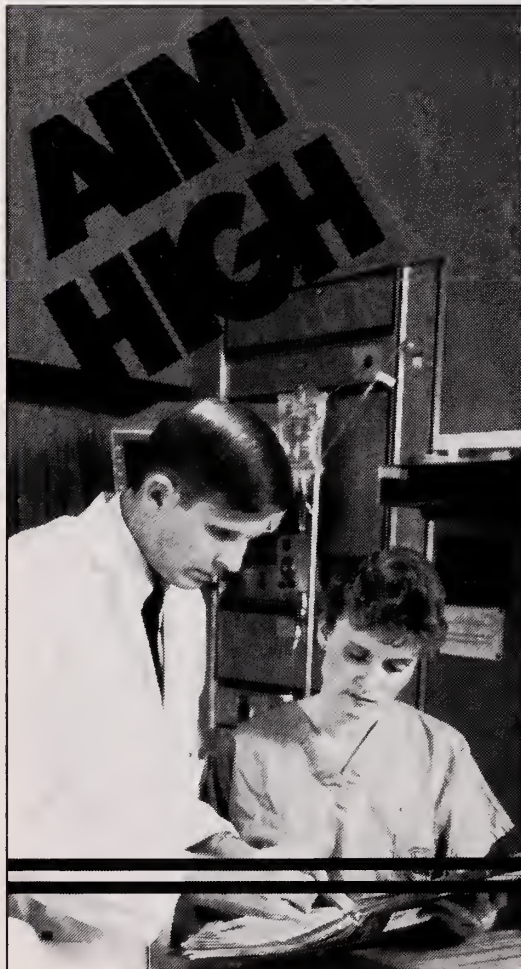
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Minneapolis: South Minneapolis-Bloomington-Richfield area, adult practice available. Additional patients for solo M.D. or as satellite for partnership or clinic. Excellent location. Retiring, flexible. 612/431-2012. 1-10/92

Self-Employed, Semi-Retired BC Internist seeks FT/PT opportunity in western suburbs of Minneapolis. Weekday ambulatory care only. No benefits package sought. Unblemished Minnesota license, 40 years. CV available. Reply to Minnesota Medicine (856), 2221 University Avenue SE, Suite 400, Minneapolis, MN 55414. 1-10/92



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General Surgeon: Busy clinical and surgical practice seeks BC/BE general surgeon to join existing department in rapidly growing multispecialty clinic. Located in the north-western suburbs of Minneapolis, Minnesota, offering suburban living with easy access to an unlimited array of family, cultural, educational, and recreational opportunities. Members of our group earn a highly competitive salary and excellent benefits, including paid vacation and CME; pension and profit-sharing plans; paid malpractice; health, life, dental, and disability benefits. For further information contact: John Bordwell, M.D., 9055 Springbrook Drive, Coon Rapids, MN 55433; 612/780-9155. *1-10/92

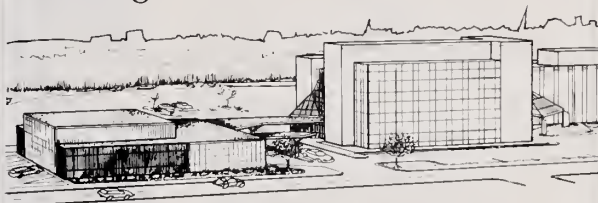
Comprehensive Medical Care: Our progressive, primary-based-care multispecialty group currently has the following BC/BE positions available: family practitioner, ob/gyn, dermatologist. We are located in the northern suburbs of Minneapolis, Minnesota. We offer a highly competitive salary, production-based compensation, and exceptional benefits package. Respond with CV to: John Bordwell, M.D., Comprehensive Medical Care, 9055 Springbrook Drive, Coon Rapids, MN 55433; or call 612/780-9155. *1-10/92

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Oshkosh, Wisconsin: Medical groups are recruiting in internal medicine, pulmonology, rheumatology, emergency medicine, ob/gyn, child neurology, child psychiatry, ophthalmology, and urgent care. Mercy Medical Center has an active medical staff of 110 physicians in all medical specialties. Oshkosh is an attractive community of 55,000 people,

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For confidential consideration, send cover letter and CV to Stan Gruhn, M.D., Riverview Clinic, P.O. Box 551, Janesville, WI 53547-0551

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- Pediatrics
- Family Practice

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St. Cloud Medical Group
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Family Practice—Minneapolis: BC/BE physicians to join 11 family practice physicians in south metro practices. Ob optional, excellent call schedule, salary, and benefits. Contact: Walter A. Hinck, M.D., or Robert M. Vogel, Administrator, Bloomington-Lake Clinic, 3017 Bloomington Avenue South, Minneapolis, MN 55407; 612/721-6511. 3-12/92

Family Physician needed to join a group of 6.5 family physicians in a well-established practice in Edina, Minnesota. Excellent benefits package. Contact: Terry Stenstrom, Administrator, at 612/925-4004; or write to Southwest Clinic, 6121 Wooddale Avenue, Edina, MN 55424. 1-10/92

Pediatrician Wanted: Large *private* practice in Layton, Utah (20 minutes north of Salt Lake City) needs aggressive, hard-working pediatrician. No capitated HMOs, no 2 percent tax on income. Live in the mountains and ski on the "greatest snow on earth" (50 minutes to snowbird). Starting salary \$150,000-\$200,000 depending upon work ethics. Limited weekend call—very flexible work schedule



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COVER

Lead Poisoning has emerged as a predominant public health concern. This issue of *Minnesota Medicine* examines lead poisoning in Minnesota and attempts to answer many questions surrounding the problem. We include an editorial promoting a lead-reduction program (page 20), a report describing treatment with chelation therapy (page 25), and a study reporting low blood lead levels among pregnant women in Hennepin County (page 29).

Photo by Bob Firth/Firth Photobank.

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Childhood Lead Poisoning

How Serious a Threat?

Edmund C. Burke, M.D.

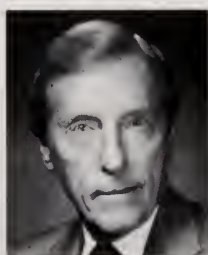
If you thought childhood lead poisoning was a topic of the past, you have been out of the loop. Currently, a sizable controversy is brewing over the significance of lead as a hazard to childhood health. This problem has suddenly become an issue of mountainous proportions—but is perhaps out of perspective.

An estimated 3 million to 4 million children in 1984 had blood lead levels high enough to adversely affect intelligence, behavior, and development, according to a report by the Agency for Toxic Substances and Disease Registry. In 1988, the agency estimated that 16 percent of all American children had blood lead levels in the neurotoxic range.

This month, *Minnesota Medicine* examines the lead-toxicity issue and includes an editorial by James Nordin, M.D., promoting a lead-toxicity reduction program (page 20), and a clinical article by Kent Wegmann, M.D., describing chelation therapy and concerns about the advisability of performing chelation provocation testing (page 25). A clinical article by Diane J. Fredeen, et al., reports low blood lead levels among pregnant women in Hennepin County, Minnesota (page 29).

The Centers for Disease Control is following a 20-year Strategic Plan for the Elimination of Childhood Lead Poisoning. The plan estimates the cost for deleading homes and compares it with the benefits that accrue from the reduced need for medical care and special education and the increase in wages that typically accompanies a higher IQ. In what it describes as a conservative conclusion, the CDC says the fiscal benefit to society from deleading U.S. homes would be worth \$28 billion more than the costs of such an effort.

In the April 1992 issue of *Pediat-*



"A sizable controversy is brewing over the significance of lead as a hazard to childhood health."

rics, Herbert Needleman, M.D., of the University of Pittsburgh School of Medicine, and Richard Jackson, M.D., of the Office of Environmental Health and Hazard Assessment, California Department of Health, support the CDC's strategic plan, which will cost billions of dollars if fully executed.

"It should not be necessary to place a price tag on the eradication of a serious childhood illness," write the authors. "The eradication of lead, this blunter of children's cognition and silent thief of their futures, meets the pragmatic test. The numbers are clear. It makes unequivocal fiscal sense to make this investment in human capital."

However, Edgar J. Schoen, M.D., takes issue with Drs. Needleman and Jackson in a letter to the editor in the September 1992 issue of *Pediatrics*. Schoen, from the Department of Pe-

diatrics at Kaiser Permanente Medical Center in Oakland, California, states that the high prevalence of elevated blood lead levels is questionable. One common screening test is not reliable at blood lead levels less than 25 µg/dL, and another common test is easily contaminated, causing false-positive results. In addition, lead screening does not meet the criteria for mass neonatal screening, and the extent of significant neurobehavioral effects is still debated. Therefore, the expenditure of billions of dollars on complex and controversial lead screening treatment and abatement programs is unreasonable, writes Schoen. In light of the many more serious and unaddressed health needs of U.S. children, he believes that directing such magnanimous efforts at the blood lead problem is to "mis-prioritize current health issues."

So, what should we conclude? At the American Medical Association House of Delegates meeting in June 1992, a substitute resolution was passed expressing concern about ramifications of the CDC augmented program on childhood blood lead screening. The resolution urges federal agencies to suspend screening recommendations pending evaluation of more current data. It also recommends that the AMA continue working with the CDC and other groups to revise and update recommendations for the prevention of childhood lead poisoning. The Academy of Pediatrics currently recommends that all children at risk be screened for lead absorption at 12 months of age, but it is revising its recommendation.

Until the lead issue is resolved, we should continue to follow current recommendations to protect the health and welfare of America's children, but let's keep the problem in perspective.

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Rural EMS: Making It Work in Minnesota

Minnesota Medicine interviews David M. Larson, M.D.

The Minnesota Association of Emergency Medical Services (EMS) Physicians is in its infancy. Currently about 100 members strong, it was incorporated in 1991 by nine charter members to create a network for physicians interested or involved in emergency medical services. Its primary goal is to support medical directors of rural ambulance services, who often are volunteers from various specialties with little or no formal EMS training.

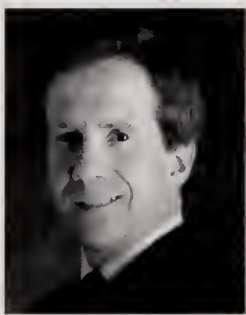
David Larson, M.D., medical director of the Emergency Department at the Northfield Hospital in Northfield, Minnesota, was the association's first president and a charter member. In the following interview, he discusses how and why the association was formed and what it has accomplished thus far. Since it started, MAEP has worked to educate ambulance and emergency department medical directors and has developed a manual of standard protocols that can be adapted to ambulance systems throughout the state.

One of the biggest problems rural EMS systems face in Minnesota are recruiting medical directors, says Dr. Larson. The position is typically volunteer, and rural physicians already carry heavy workloads; nonetheless, says Larson, the position is rewarding and of great importance to the community. To help alleviate the problem, the association has produced a video on emergency medical services that can be used as a tool to recruit EMS medical directors.

Dr. Larson is also a family physician at Family Physicians of Northfield and is chair of the Northfield Hospital's Critical Care Committee. He attended medical school at the University of Minnesota and subsequently completed a family practice residency at Hennepin County Medical Center. Allen W. Autrey, M.D., an internist, is the association's new president. He is medical director of Emergency and Critical Care Services at District Memorial Hospital in Forest Lake, Minnesota.

For more information about the Minnesota Association of EMS Physicians, contact Jennifer Syltje at 612/378-1875 or 800/999-1875.

Minnesota Medicine: Dr. Larson, you have just completed your term as the first president of the Minnesota Association of Emergency Medical Services (EMS) Physicians. What are the goals and objectives of your organization?



David M. Larson, M.D.

"One of our biggest problems is getting rural physicians interested in EMS."

Larson: Our primary goal is education and support for medical directors. Most primary care physicians don't have any training in prehospital care, so we feel that education is a very important component of our organization. In order to educate EMS physicians, we cosponsor an annual meeting with the Minnesota Department of Health and the Minnesota Ambulance Association. We bring in speakers to discuss prehospital care, and we also have developed an introductory course on some of the basics of being a medical director. In conjunction with the Minnesota Medical Association and the Department of Health, we have just produced a videotape on the medical director's role in providing emergency medical services.

Minnesota Medicine: How would you define EMS?

Larson: EMS is really an entire system. The first part is access to care—911 access and the dispatching centers. The next component of the system involves prehospital care—care given by first responders (emergency medical technicians and paramedics). Then there are the emergency departments in the hospitals. So emergency medical services refers to everything from access to care to treatment at a trauma center, and it also includes educating patients about accident prevention.

Establishing MAEP

Minnesota Medicine: How did you become interested in EMS, and how did the Minnesota Association of EMS Physicians (MAEP) get started?

Larson: When I came to Northfield nine years ago, I was very impressed with the whole area of emergency medicine and prehospital care. I noticed that we saw the same

critical injuries in our emergency department as I had seen while working at Hennepin County Medical Center in Minneapolis. However, we didn't see them nearly as frequently, and I didn't feel that we were as prepared as we could be to handle these critically injured patients. I also became aware of the importance of our local ambulance service and the role it plays. I saw there was a lot of room to improve the emergency medical care and the prehospital care we provided. Eventually, I was asked to be medical director of the ambulance services, although I did not have much formal training in prehospital care. After spending a lot of effort trying to learn on my own, I decided it would be worthwhile to work with other physicians, so we wouldn't all be reinventing the wheel. Daniel Hankins, M.D., from Mayo Clinic put it very nicely when he said that a lot of us experience a "Robinson Crusoe syndrome." A number of us were out there by ourselves in busy practices, and we came together to form the Minnesota Association of EMS Physicians to offer mutual support and education for EMS physicians around the state. The idea actually originated with Dr. Ernie Ruiz at Hennepin County Medical Center. A few years ago, after I talked with him about some of our needs, he suggested that rural physicians develop an organization of this type.

Minnesota Medicine: When did you formally organize?

Larson: The idea finally got off the ground in 1990 with support from the Minnesota Medical Association, the Minnesota Ambulance Association, the Minnesota Chapter of the American College of Emergency Physicians (ACEP), and, one of the real forces behind this organization, Dr. Tim Crimmins, who was then president of the Minnesota Chapter of ACEP. In the fall of 1990, we organized a steering committee, eventually developed bylaws, and incorporated in February 1991. We are now well on our way to becoming a very successful organization.

Minnesota Medicine: How is your association different from the Minnesota Chapter of the American College of Emergency Physicians? Is there a different focus for the two groups?

Larson: That's a very good question. The Minnesota Association of EMS Physicians is especially committed to supporting the needs of medical directors of rural ambulance services throughout the state. We are an organization for all physicians involved in emergency medical services, whatever their specialty; whereas the Minnesota Chapter of ACEP traditionally has been a group of specialists in emergency medicine. We wanted to create an organization that crossed specialty lines, as our group does. We recently conducted a survey of medical directors throughout the state—with good response—and we found that about 65 percent of respondents were in primary care; 61 percent were in family

practice, 5 percent in internal medicine, 20 percent in emergency medicine, and 7.5 percent were surgeons.

Providing EMS in Rural Communities

Minnesota Medicine: Do you think the problems in providing emergency medical services differ in rural vs. urban communities?

Larson: Very much so. For example, rural areas have unique access problems. Treatment is more likely to be delayed in rural areas, where the distances are often greater between an accident site and the local hospital; in some rural areas, the patient may have to travel 50 miles to the nearest hospital. Or, in some cases, the accident is not immediately discovered. Also in rural areas, the prehospital care givers are often volunteers who have basic emergency medical technician skills as compared with the full-time paramedics

in urban areas, who may have advanced skills. Another problem is that we do not see critically injured patients very often in the rural areas, so it's difficult for care givers to maintain their skills. Interestingly, in the case of trauma, even though 70 percent of motor vehicle accidents occur in urban areas, nearly 70 percent of the fatalities from these types of accidents occur in rural areas.

Working with the Health Department

Minnesota Medicine: Tell me about your relationship with the Minnesota Department of Health.

Larson: MAEP works very closely with the Department of Health, which has been tremendously supportive in getting this organization off the ground. The department has given us grants to help with education. In turn, one of our roles is to provide advice to the Department of Health and to the Minnesota technical college system regarding emergency medical technician (EMT) testing and training and EMT and paramedic curricula.

Minnesota Medicine: How is your organization funded?

Larson: Membership costs \$25; and with only about 100 members, we don't have a great deal of funding from that source. Fortunately, we have been able to get funding from the Department of Health for the last couple of years, and that funding has been used primarily to hold our annual conference and to fund the development of a book of protocols for medical directors.

Providing Support to EMS Physicians

Minnesota Medicine: Tell us about your book.

Larson: Many medical directors are required to develop standing orders and protocols for each department, but most rural physicians are very busy and don't have time to do this. The MAEP board of directors developed a

model set of protocols, primarily for basic life-support ambulance services, that we distributed to all our members and to all medical directors throughout the state. These protocols and operating procedures can be adapted to each ambulance system. One of our objectives as an organization is to ensure that the "Policies and Procedures for Medical Directors" manual is current. We are continuously reviewing and updating it.

Minnesota Medicine: What sort of problems do you encounter in your overall efforts?

Larson: One of our biggest problems is recruitment—getting rural physicians interested in EMS. Most rural physicians are busy and take on the role of ambulance medical director for no pay and little recognition. There are so many things to do in rural areas and not enough time. Nonetheless, I hope physicians see the need to get involved in overseeing local ambulance services; it's very important. Probably our greatest concern is trying to relay that message to rural physicians throughout Minnesota. We want physicians to get involved, to see the importance of EMS, and for their benefit, to join our organization for the mutual support and education membership offers.

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The Effects of Childhood Trauma Upon Adult Recovery from Injury and Illness

Alan S. Bensman, M.D., Jerrold Winters, A.C.S.W., and Peter Kizilos, M.A.

Childhood experiences that cause significant emotional or physical trauma can adversely affect an individual's ability to recover from future injuries or illnesses. Most medical attention directed at this problem has focused on either the emotional damage or the acute physical injuries resulting from family violence. Too little attention has been paid to the chronic physical problems these people develop and the manner in which they present when first seen by a physician. In fact, many physicians find exploring such issues as domestic violence in the clinical setting "analogous to opening Pandora's box."¹

Recently, Springs and Fredrich² from the Mayo Clinic identified "the relationship between sexual abuse and subsequent health risk behaviors" and found a significant increase in health problems and somatization in the abused person. Moeller et al.³ presented results of a study showing that adults who were traumatized in childhood often take longer to recover from injury and illness. Research done at the National Institute of Mental Health⁴ indicates that childhood victims of sexual abuse undergo hormonal changes as a result of the experience. Notably, people who are traumatized in childhood sometimes have permanent physical alterations that prevent them from full, normal development. Schofferman et al.⁵ at the San Francisco Spine Institute have identified a close correlation between

unsuccessful spine surgery and childhood trauma. Also, in Russell's random survey of 30 patients with chronic musculoskeletal symptoms, 54

disease, hardly ever recognized by physicians, psychologists or psychiatrists."⁷

Childhood trauma can transfer a life-corroding agent to the traumatized person. As children, these individuals internalize the traumatic experience and develop a shame-based identity. As adults, they have not always learned how to value, care for, or nurture themselves. Too often they find themselves in abusive relationships because the abuse feels familiar, and they are apt to repeat the abusive patterns learned in childhood by sustaining unhealthy adult relationships. This dysfunctional pattern can be passed from one generation to the next.

The Childhood Trauma Syndrome

Certain patterns of symptom presentation and history can provide significant clues to better understanding the degree of childhood trauma a patient has sustained and its effect upon the patient's health problems. Patients with childhood trauma syndrome (CTS) share a set of common characteristics that distin-

guishes them from patients who do not. The majority of patients with CTS are significantly overweight or underweight; have had multiple operations and illnesses; have poor, almost non-existent, self-nurturing habits (such as wearing seat belts and not smoking); have identifiable traumatic childhood experiences; and may



Illustration by Linda Frichtel

percent identified themselves as victims of physical, verbal, or sexual abuse, and 33 percent reported that they had lost a parent at an early age.⁶

According to Figley et al., "[Chronic illnesses] arise too often from the acute and subacute syndromes of post-traumatic stress disorder. It is an insidious, malignant

not trust their own perceptions of self or others.

One way a physician can identify individuals who have had childhood trauma is by asking patients about trauma or abuse on a questionnaire that solicits other personal health information. The questionnaire should include items pertaining to divorce or the death of a parent during childhood. Information about multiple illnesses, surgeries, and other health problems is also significant. We find that most patients consider using a questionnaire a less threatening way to reveal their histories than a personal interview.

It is important that the physician follow up with appropriate discussion that can provide additional information. A patient who leaves out pertinent information on a questionnaire may be providing a clue to specific problems. When inquiring about trauma, it is important that the physician note any changes in the patient's gestures or facial and vocal expression. The physician should also ask the patient about any troubling dreams or fragmented memories.

The Physician-Patient Relationship

Patients with CTS have learned to distrust people who help them, including professional care givers. Having had poor health most of their lives, these patients do not know how to maintain healthy lifestyles. They become suspicious of anyone who professes to care for them, because they do not see themselves as worthy of love and care. They fear abandonment or lack of concern. This has serious consequences for the physician-patient relationship.

As adults, people with CTS present themselves in the physician's office with limitations in the basic coping and self-care skills required to overcome a serious debilitating illness. As a result, they fail to follow through with medical treatment, miss appointments, and generally adopt a rebellious, passive-aggressive behavior pattern. This is extremely frustrating for the physician.

Physicians and other health professionals who do not recognize the

syndrome may unwittingly react negatively to these patients. When the patient does not respond to treatment, the physician may become angry and may blame the patient for his or her condition. This reinforces both the patient's distrust of care givers and the patient's belief that he or she does not deserve good health.

Treating the Patient with CTS

The key to treating the patient with childhood trauma syndrome is to develop a stable physician-patient relationship characterized by mutual trust, respect, and honest communication. The physician must make a genuine commitment to care for the patient and to take the time necessary to build a non-abusive, long-term relationship. Under these conditions, the CTS patient's reluctance to trust the professional care giver and to follow a prescribed treatment program can be overcome. But even with improvement, the patient may test the physician's limits and may seem to regress. If a person has not been able to adequately resolve the emotional components of the trauma, it is less likely that he or she will be able to recover from the physical symptoms. It is appropriate to ask whether the patient would like to talk with someone else about his or her past, and the physician should be prepared to refer the patient to a mental health professional.

Following are guidelines physicians can use when working with patients who have childhood trauma syndrome:

- Nurture healthy behavior and set limits on destructive behavior. Give these patients permission and support to start regaining control over their lives and to become active participants in their own treatment programs. This can be done by reinforcing any self-nurturing behaviors (e.g., wearing seat belts, eating breakfast, and starting an exercise program). Because these patients are seeking approval, the physician's encouragement and acknowledgment of change are essential to treatment success.

- Explain to the individual that many chronically ill or injured people share a similar painful childhood.

- Before starting any medical treatment program, discuss the goals, expectations, and guidelines. Because CTS patients believe caretakers will harm or abandon them, they will test the physician's authenticity. Clearly define your role as physician, and clearly state and enforce specific guidelines of proper conduct by everyone involved.

- Build a stable physician-patient relationship characterized by mutual trust. The trauma victims who have

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learned to survive by not trusting anyone will seek to prove that all professional helpers will fail them. Remember, however, that feeling sorry for patients and excusing their inappropriate behavior merely reinforces it. In addition, avoid responding with anger or abuse, which similarly reinforces the patient's negative outlook.

- Seek help and support from other professionals. An interdisciplinary approach to treatment with the involvement of clinical social workers, psychologists, and others is advisable.

- Avoid procedures or treatments that have potential for causing harm, including non-essential medications and invasive procedures. If a patient does not feel comfortable with a given medication or any other form of treatment, affirm the patient's right not to take it.

- When patients with childhood trauma syndrome have been so severely traumatized that they are unable to respond to any constructive care, refer them to counseling, provided medical treatment can be de-

ferred, until the psychosocial issues are sufficiently resolved.

Summary

Many patients with chronic injury or illness suffer from childhood trauma syndrome. As a result, they do not take proper care of themselves and are at risk of developing long-term disabilities. Physicians who understand the dynamics of CTS can help these patients regain control over their own bodies and health. By building therapeutic relationships with these patients, physicians can restore trust and help them lead happier, healthier lives. MM

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Jerrold Winters is a clinical social worker and director of Behavioral Services at the Minnesota Center for Health & Rehabilitation.

Peter Kizilos is a Minneapolis-based free-lance writer and researcher who specializes in psychology and health-related subjects.

REFERENCES

1. Sugg N, Inui T. Primary care physicians' response to domestic violence. *JAMA* 1992; 267:3157-60.
2. Springs F, Fredrich W. Health risk behaviors and medical sequelae of childhood sexual abuse. *Mayo Clin Proc* 1992;67 (6):527-32.
3. Moeller TA, Bachmann GA. Prevalence of childhood abuse and health consequences in adult women. Read before a meeting of the American College of Obstetricians and Gynecologists, San Francisco, California, May 1991.
4. Putnam F. The psychological effects of sexual abuse. Read before the American Psychiatric Association annual meeting, New Orleans, Louisiana, May 1991.
5. Schofferman J, Anderson D, Hines R, Smith G, White A. Childhood psychological trauma correlates with unsuccessful lumbar spine surgery. *Spine* 1992;17(Suppl 6):138-44.
6. Russell D. Teach: a rehabilitation program that works for chronic low back pain. Read before the National Organization of Nurse Practitioner Faculties annual meeting, Orlando, Florida, April 1989.
7. Figley CR, ed. *Trauma and its wake: traumatic stress theory: research and intervention*. New York: Brunner/Mazel, 1986.



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Emergency Medicine

Overcrowding, stress-related job burnout for emergency room physicians and other personnel, violence spilling over into the hospital with the surge in gang activity—it's the stuff of movies and, increasingly, real life in urban emergency departments, even in Minnesota. The trials and tribulations of

The Rural Challenge

providing emergency medical care in our metropolitan areas are well documented, both in professional journals and the conventional media. It's dramatic—lives hang in the balance—and it's important to

everyone, since those who will one day require emergency medical care must entrust their well-being to this system. But it's only part of the story.

.....

Chuck Benda

In rural Minnesota, the typical scenario is far different. It's no less dramatic—no less important. But emergency medical care in rural Minnesota faces its own set of problems. Although delivering rural emergency care is not made more difficult by overcrowding and gang violence, the challenges are exacerbated by a number of factors inherent to rural settings, including long distances to the hospital, limited access to the kinds of sophisticated medical facilities available in the metropolitan area, and physicians who, for the most part, have been trained in primary care rather than emergency medicine.

Emergency medical care is provided to Minnesotans under the auspices of the Minnesota Department of Health Emergency Medical Services (EMS) program. The rural EMS system in Minnesota is an amalgam of programs of various levels of sophistication operated by scores (mostly volunteer) of 911 dispatchers, first responders, paramedics, nurses, laboratory technicians, physicians, and administrators. When any medical emergency arises—whether it's a heart attack, farm accident, fire, or hunting accident—these people are responsible for getting to the victims, stabilizing them for transport, getting them to the hospital, and assuring they receive appropriate care and follow-up. The story of rural EMS is about how these people make the system work.

As the Minnesota Department of Health's chief of EMS, Jennifer Deschaine oversees the planning, development, administration, and regulation of EMS statewide. "My mandate is to make sure we have programs in place designed to reduce mortality and minimize disability by improving the quality of available prehospital, in-hospital, and inter-hospital EMS," says Deschaine. "In rural areas, we depend largely on volunteers. Unlike the urban areas, the volume is simply not high enough to support paid personnel."

To get this job done, the department relies on a variety of personnel, including five EMS consultants and an EMS Advisory Council appointed by the Minnesota commissioner of health. It also works with the 49 community health boards within the state, the 311 ambulance providers, all of the education and certification programs, and professional associations related to EMS.



John Zenk, M.D., conducts EMT training at the Hutchinson Community Hospital.

Medical Directors Answer the Call

According to Deschaine, however, the key to successful EMS in rural Minnesota is the EMS medical directors—physicians throughout the state who volunteer their time to manage and oversee the EMS programs in their communities.

"One of the biggest problems we face with our rural EMS is in recruiting, training, and retaining medical directors," says Deschaine. "It requires a significant time commitment from them, and most of them are already carrying a heavy workload. Essentially, according to state statute, the prehospital care providers practice off the medical director's license, so the medical directors have to be able to provide training to these people and help establish the guidelines, protocols, and standing orders the prehospital people use. There is already a shortage of physicians in rural areas and to ask them to take on these additional responsibilities on an ongoing basis is difficult."

John L. Zenk, M.D., EMS medical director at the community hospital in Hutchinson, Minnesota, is one physician who has answered the call in spite of the extra demands it places on his life. For him, emergency medicine is a magnet—the exotic side of his rural practice that keeps life interesting and provides a rewarding way to connect with the people in the Hutchinson area and give something back to the community.

"It's so different from what I do every day in internal medicine," says Zenk. "A lot of my practice revolves around the treatment of chronic medical illness. Emergency medicine is the treatment of exciting acute illness or trauma. Things move faster; it's more exciting. Lives can be saved in a matter of minutes. It's a good change of pace from my regular practice."

Zenk, who claims he was somewhat naive about what he was getting into, says he was "ambushed" by the local emergency medical technicians (EMTs) as soon as he came to Hutchinson in 1986 and recruited to become medical director of EMS. "I had just left an internal medicine residency at Hennepin County Medical Center (HCMC), so I had gotten a good deal of experience in emergency medicine," he says, adding with a wry laugh, "I guess I'm just too young to know better. I'm still fascinated by and drawn to emergency medicine."



A quiet afternoon in the Hutchinson Community Hospital Emergency Department.

"In my area, we're fortunate to have plenty of physicians involved in EMS," says David M. Larson, M.D., EMS medical director in the community hospital in Northfield, Minnesota. "But in other parts of the state, they're not so fortunate.

"In many rural areas, the physicians are way overworked. And working in EMS doesn't just mean working in the emergency room. The physicians—especially the medical directors of EMS—need to be involved in overseeing the EMS system in their communities. That includes access—calling 911—and training and setting protocols for the first responders, EMTs, and ambulance responders. That's why we have problems recruiting and retaining physicians."

In Northfield, Larson and his colleagues have the "luxury" of sharing on-call emergency room staffing with 14 physicians. Darrell Carter, M.D., does not share that luxury. Carter is the EMS medical director in Granite Falls, Minnesota, and simply finding the time to meet his responsibilities as medical director is probably the biggest problem he faces. There are only four physicians in Granite Falls, which means each is on call one day out of four.

"I find rural practice—including my EMS work—very rewarding," says Carter. "The people look to you for help. You play an important role in the community. But we don't need those emergency room hours.

"We just don't have enough help to take care of the needs. You get tired, and your family suffers because you're tied up and you can't get home. When you're on call, even something as simple as going to church can become impossible. Sunday morning is busy ER time."

Inexperience a Big Problem

Along with the time demands, rural EMS physicians must constantly deal with a set of problems quite different from their urban counterparts'.

"The problems of rural EMS are quite a few," says Zenk. "First of all, severe, life-threatening trauma occurs in your hospital infrequently. At HCMC, an emergency room physician might see gunshot wounds or knifing victims almost daily. We might see a gunshot wound once a year. We see blunt motor vehicle trauma more frequently, but it's still not frequent enough that it allows us to keep our skills up to where they're supposed to be."

Carter agrees, "That's the really scary part of being out here. Everything that comes into the ER at HCMC comes into the ER here—just not as often."

Larson, who is immediate past president of the Minnesota Association of EMS Physicians, referred to a recent study done in rural Washington and Idaho that examined the frequency with which physicians are confronted with severe trauma in communities roughly comparable in size to Northfield. "They found that the average physician saw fewer than one critically injured trauma patient per year," Larson says. "It doesn't matter how well you have been trained, when you get out in a rural area and you only see these things once a year, it's really difficult to maintain your skill.

"Furthermore, many of the physicians in rural areas haven't had much training in emergency medicine," Larson says. "Most of them are primary care physicians—family practice, internal medicine—whereas in urban areas, the physicians are fully trained as emergen-

cy medicine physicians. We did a survey recently of our EMS medical directors throughout the state, both urban and rural. Sixty-five percent were in primary care, and only 20 percent were in emergency medicine."

Zenk cited the lack of adequate training and interest in trauma management among physicians, nurses, and prehospital care providers as a serious problem in rural areas.

"In any hospital, you're going to find a few doctors and nurses who are wild about trauma management and have taken the time to get either basic trauma life support training or even advanced trauma life support training," Zenk says. "But some physicians won't take the time to get this training. That leads to a great variation in how patients are treated from one shift to the next."

Given the lack of emergency medicine training and infrequency of exposure, it can take years for physicians to become proficient in the emergency room, according to Carter. To help ameliorate that problem, the group at Granite Falls tries to make sure an experienced physician is always available for back-up support when the less experienced physicians are on call.

In many communities, the EMS medical director is responsible for assuring that the prehospital care providers have the necessary training and sufficient interest in their work.

"A medical director needs to spend time working with the EMTs to help them improve," says Zenk. "You have to make them understand that what they're doing out there is important. You also have to do run reviews for them and tell them what they did wrong and what they did right. It may not seem like much, but inadequacies in the field can lead to time delays, and they can even lead to improper treatment of life-threatening complications."

Communities Adopt Their Own Strategies

To cope with the special problems of rural EMS, Zenk, Carter, and Larson have adopted a variety of strategies, but what provides a perfect solution in one community can be counterproductive in another.

Because of the extremely heavy workload, one of the first priorities for the EMS program in Granite Falls has been getting more help. "We got residents to provide part of the ER coverage on weekends," says Carter, a move that permits the local physicians to take some time for themselves and their families.

Because they have more physicians to begin with, in Northfield, Larson and his colleagues have gone the other direction. "We used to have residents come in to work the emergency department," Larson says. "There are a lot of very good physicians in that group, but I don't think they provide the continuity of care, and there can be a lot of fluctuation in the quality. Since we've switched to having our own local physicians work ER, I think the quality of care has improved."

"Unfortunately, in a lot of communities, the local

Rural EMS Video Available

The Minnesota Medical Association has produced a 35-minute video called "Vital Link" that tells the story of rural EMS and explains the role of the ambulance medical director. The video, which was produced with monies from a state grant through the Minnesota Department of Health, features footage of rural EMS in action in Granite Falls and Northfield, Minnesota, and interviews with trauma patients and their families.

"We put together a task force of 15 people to plan the video," says Mark Vukelich, MMA communications director. "The task force included medical directors, emergency medicine physicians, and other EMS personnel who are concerned about EMS in this state. We tried to look at the most critical issues and find out why people become EMS physicians."

The video, which is the first of its kind in the nation, is intended to be used to help recruit medical directors. People interested in viewing "Vital Link" may obtain a copy from the Minnesota Department of Health by calling Emergency Medical Services at 800/747-2011 or 612/623-5482.

physicians are so busy, they'd just as soon not have anything to do with emergency medicine. Naturally, they want to have weekends off and not have their nights interrupted by emergency calls, but I think that really hurts the quality of care in a community."

Despite the inherent differences in their situations, all three medical directors have worked hard to upgrade the quality of care in their own EMS programs. That work has led to some remarkable progress.

"When I first came to Northfield, things were pretty unorganized," Larson says. "One physician and one nurse worked the ER. It led to unnecessary delays. Now we've developed a trauma team consisting of three physicians and all of the necessary support personnel. The team is called in and is ready before a serious trauma patient gets to the hospital."

Zenk employed similar tactics to revamp the EMS program in Hutchinson during the past several years.

"We realized we had some serious problems because we had no means of dealing with trauma in an organized manner and because the way we were handling things was not resulting in enough good outcomes," he says. "Oftentimes, there was only one doctor in the emergency room running around ... unable to concentrate on one case because of the demands."

Soon after he became medical director, Zenk and his colleagues established formal protocol and trauma codes for the ambulance personnel. By referring to the criteria, the EMTs can determine the trauma code and call it into the hospital.

"As soon as we get the trauma code, we start calling teams together," Zenk says. "By the time they get here, we can get all the doctors, nurses, laboratory, and x-ray technicians we need together. Now it's like sweet music when somebody rolls in."

To further streamline the EMS system in Hutchinson,

Zenk has spent many hours working with the prehospital care providers—first responders and EMTs. They hold monthly training sessions on the use of defibrillators, and Zenk has been able to persuade many first responders—often police personnel and fire department rescue squads—to upgrade their training to EMT status.

To combat the problems associated with the infrequency of certain emergency room procedures, they have festooned the walls of the Hutchinson emergency room with large signs that summarize basic advanced trauma life support principles.

"Even though you don't do trauma every day, you can just look up on the wall and see exactly how you work through your primary survey and resuscitation phases to make sure you're not forgetting anything," Zenk says.

For follow-up, Zenk started a monthly conference to review particularly interesting or useful cases. Attendance has been high and includes physicians, nurses, prehospital care providers, and even members of the community. Occasionally, the patients themselves have attended.

"We had one guy come who had been resuscitated from a defib arrest by the ambulance crew in a local grocery store," Zenk says. "He came in and told about his experience—what it was like to be dead and how he's back working now. That was great fun for us. It's important to see the impact we can have when things are done right."

EMS Physicians Group Provides Support

In recent years, the advent of the Minnesota Association of EMS Physicians has provided a source of support and information for EMS medical directors. "We started the association to provide education and mutual support," says Larson. "We also publish a newsletter in order to update our members on advances in emergency medicine, and we have developed a standard book of protocols and procedures for prehospital care."

Zenk credited the Minnesota Association of EMS Physicians with making it easier for Hutchinson to improve its EMS program. "The standardized book of protocols is now used by basic life support ambulance services throughout the state," he says. "This is an amazing breakthrough for our group, and it really helps the medical directors in the various communities."

Physicians Seek More Improvements

Although he's pleased with the progress that has been made at Hutchinson, Zenk would like to see additional changes in rural EMS in Minnesota. He would like to have as many of the ambulance services as possible upgraded to advanced life support, because it would offer a greater chance of survival to emergency patients. He would also like to see more training and equipment made available to EMTs and ambulance providers.

"I also think the government should make it mandatory for any doc who works the ER to be both ATLS [advanced trauma life support] and ACLS [advanced cardiac life support] certified. It might make it more difficult to get enough doctors to cover the ERs, but we need to make sure they cover it well."

Carter, too, sees the need for additional education for rural EMS physicians, although he suggests reform of the education system to better prepare physicians for emergency room work—without becoming overly time consuming for the rural doc.

"Right now there are five different critical care courses—each requiring two days for certification or recertification," he says. "They have to be updated every two years in most cases, or four years for trauma. I'd like to see a course developed that could encompass them all—or a system that would better prepare and update us on the sorts of problems that hit us once in a blue moon."

These and other problems are the things Deschaine is working to overcome. She sees some success—and a need for further progress.

"In the last three years, we have certified 50 percent more EMTs," Deschaine says. "Retention is still a problem, but we're educating and certifying more people." She says there's also been a decrease in response time and an increase in the quality of care provided.

Deschaine and her colleagues are collecting outcome-based data to assess the quality of emergency medical care in the state. Some statistics initially make the situation look grim—for example, in 1990 nearly 70 percent of motor vehicle accidents occurred in urban areas, while more than 66 percent of motor vehicle accident fatalities occurred in rural areas. But Deschaine says further study is necessary to make useful assessments and changes. She asks, "Is the problem no seat belt use? Poor roads? Unsafe speeds? Or is it because we're not getting first responders there fast enough? Or because the transport distances are so great?"

The Department of Health has applied for a federal grant to devise a trauma system in Minnesota with a full-time coordinator to help evaluate the existing systems and make recommendations for improvement. The department is also developing a long-range plan to set priorities and goals for improving EMS during the next five to 10 years.

Ultimately, however, the quality of care depends on the many volunteers who provide the service. "People can drive to the city when they have an elective procedure they want done—but if they have a heart attack, or they're injured, they present at a local hospital," says Larson. "I think the rural physicians and other care providers need to see how important they are." **MM**

Chuck Benda is a free-lance writer and editor living in Hastings, Minnesota.

"When you get out in a rural area and you only see these things once a year, it's really difficult to maintain your skill."

—David Larson, M.D.

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1. Benson RC Jr. Laser photodynamic therapy for bladder cancer. *Mayo Clinic Proc* 1986;61:859-64.
2. Guttormson NL, Bubrick MP. Mortality from ischemic colitis. *Dis Colon & Rectum*, to be published.
3. Chatterjee SN. Use of GOR-TEX grafts as vascular access procedure for chronic hemodialysis. Abstract of a paper submitted to the European Society for Artificial Organs Eighth Annual Meeting, Copenhagen, August, 1981.
4. Thompson NW. Thyroid and parathyroid. In: Welch KJ, Randolph JG, Ravitch MM, et al., eds. *Pediatric Surgery*, 4th ed. Chicago: Year Book Medical, 1986; vol 1, 522-33.

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A Minnesota Perspective on Childhood Lead Poisoning

James Nordin, M.D., M.P.H.

The reduction of excess lead absorption in children should become a goal of Minnesota's medical and public health communities. Lead poisoning is a medical and a housing problem, and both areas must be addressed. Achieving this goal will require a coordinated lead-toxicity-reduction program funded by a variety of sources, both public and private.

Three questions and the search for their answers form the underpinning of such a program: 1) what is the prevalence and epidemiology of this problem in Minnesota's communities? 2) who are the affected children? and 3) what interventions are most effective?

Widespread screening is needed to answer the first two questions. To answer the third, multiple approaches, both environmental and medical, should be tried within an experimental design.

The Data

In the literature

The literature on the effects of low-level lead is controversial and fraught with methodological pitfalls. Even so, the data make it sufficiently clear that blood lead levels as low as 10 to 15 µg/dL, and perhaps even lower, are harmful to the neurological development of young children.

A meta-analysis of 24 mostly retrospective studies found that all these studies show a decline in intellectual function as lead exposure increases.¹ The slopes of the relationship were similar in all the studies.

Two well-done prospective whole-blood lead studies support these conclusions. One is the Port Pirie Cohort Study, an examination of the population in Port Pirie, Australia, a town near a lead smelter.² The second is a study by Bellinger et

al. of a cohort of Boston children.³ In both studies, for each natural log increase (2.76x) in blood lead levels, there was an 8- to 10-point drop in IQ or other measures of brain function.

Local studies

Preliminary data from Group Health, Inc., Hennepin County Medical Cen-

"Excess lead
absorption is a
problem in areas
throughout the
Twin Cities."

ter (HCMC), and Minneapolis Children's Medical Center (MCMC) confirm that children from the Twin Cities metropolitan area continue to absorb excess lead.

Group Health has been performing routine micro-lead screening on children age 6 months to 2 years since October 1991 (J. Nordin, unpublished data, August 1992). As of August 1, 1992, we had performed 4,100 blood lead tests on 3,987 children. The results of these tests (counting each child once) are presented in Table 1.

In terms of socioeconomic status, in most of the families we've seen, at least one person in the household has a job that provides benefits. Geographically, most of the children with elevated blood lead levels have been from the near south side of Minneapolis, the north side of Minneapolis, and the central part of St. Paul. However, we have seen small numbers of

children with elevated blood lead levels from areas throughout the Twin Cities.

According to a letter from R. Seigel, M.D. (May 1992), Minneapolis Children's Medical Center has also been screening for elevated blood lead, and the results of its blood lead tests appear in Table 2.

Hennepin County Medical Center conducted both venous-blood lead testing and capillary whole-blood lead testing from January through June 1992, according to a letter from G. C. Fifield, M.D. (May 1992). Blood lead levels from the capillary samples are summarized in Table 3.

The data from MCMC and HCMC are not from randomly sampled children and may include some duplicate blood samples. Nonetheless, the results indicate that children in the areas around both hospitals are at an unacceptable risk for increased lead absorption, and, taken together, the data from the three studies support several preliminary conclusions:

1. Excess lead absorption is a problem in areas throughout the Twin Cities metropolitan area.

2. Areas of increased risk are located primarily around the central cities.

3. Low socioeconomic status is a potent predictor of increased risk of excess lead absorption, regardless of geography.

4. Over several years, a well-designed, integrated lead-toxicity reduction program could dramatically reduce the problem.

The Lead-Toxicity-Reduction Program

To be successful, a lead-toxicity-reduction program should include these components (proposed goals of

Table 1

Blood lead screening of children, conducted by Group Health, Inc.

Lead level	No. of children	Percent
<10 µg/dL	3,868	97.6%
10-14 µg/dL	61	1.5%
15-19 µg/dL	6	10.3%
≥20 µg/dL	<u>15</u> 3,950	0.4%

Table 2

Blood lead screening of children, conducted by Minneapolis Children's Medical Center

Lead level	No. of children	Percent
<10 µg/dL	473	69%
10-14 µg/dL	155	23%
≥15 µg/dL	<u>51</u> 679	8%

Table 3

Blood lead screening of children, conducted by Hennepin County Medical Center

Lead level	No. of children	Percent
<10 µg/dL	1,039	84%
10-14 µg/dL	99	8%
15-19 µg/dL	100	4%
≥20 µg/dL	<u>53</u> 1,291	4%

such a program are listed in Table 4):

- education of the public and medical community,
- targeted education of high-risk groups,
- widespread screening to identify the cases,
- diagnosis,

Table 4

Proposed goals for a comprehensive lead-toxicity-reduction program in Minnesota

Primary goal

To markedly decrease the number of children with excess lead absorption in Minnesota by the year 2000.

Subgoals

1. To bring to zero the number of Minnesota children with whole-blood lead levels of 25 µg/dL or above.
2. To determine the number of children with whole-blood lead levels of 15 to 24 µg/dL and to decrease it by 80%.
3. To study and document carefully all aspects of the program.

- medical treatment,
- an environmental assessment to find the source(s),
- abatement of the source(s),
- case management of affected children,
- effective follow-up and retesting of affected children and their housing,
- replacement of the worst housing, and
- epidemiologic evaluation of the data, the cases, the program, and the methods of environmental treatment.

The Physician's Role

The health care provider has multiple roles in the broader effort to reduce lead toxicity, the most important being providing guidance to parents about childhood lead poisoning and its prevention, screening for lead poisoning, and educating parents about reducing blood lead levels (see page 22, "Lead Education Materials"). Additionally, physicians must coordinate their efforts with local public health officials and ensure that children with excess lead absorption receive appropriate medical, environmental, and social service follow-up. The public health department also has numerous responsibilities in this process, most importantly, ensuring that necessary screening is occurring and developing a primary prevention plan focused on highest-risk sources and populations.

Screening for Lead Poisoning

The Centers for Disease Control's lead screening guidelines of October 1991 state, "Virtually all children should be screened for lead poisoning, unless it can be shown that the community in which these children live does not have a childhood lead poisoning problem." For now, that means virtually all children in Minnesota should be screened. A year from now, after prevalence studies sponsored by the Minnesota Department of Health are complete, some low-risk areas in the state may not need to screen.

Whole-blood lead screening is the test of choice. Ideally, all children should be screened at about 1 year of age and again at 2 years, if possible. Children at high risk, such as those living in older housing, should be tested every six months up to at least age 3, and preferably up to age 6. At a minimum, all children in central cities and those in suburban and rural areas who live in housing built before 1950 should be tested at least once.

Medical Treatment, Environmental Abatement

For treatment of blood lead, the CDC guidelines recommend a multi-tiered approach depending on the level.⁴ The CDC recommends that children with blood lead levels of 15 µg/dL be reported to public health authorities for frequent follow-up blood lead testing and investigation and clean-

Lead Education Materials

Several professional and community education materials on lead poisoning are available at no charge from the Minnesota Department of Health Lead Program, which encourages physicians to order single copies of the "materials for health professionals" for staff members interested in the lead poisoning issue, and to order multiple copies of the community education pieces for distribution to parents of young children.

The U.S. Centers for Disease Control's statement, "Preventing Lead Poisoning in Young Children," is the current set of guidelines from the U.S. Department of Health and Human Services, and the Health Department recommends the 19-page "Lead Poisoning and Children" booklet as an excellent overview of the lead poisoning problem. It was developed specifically for health care professionals.

Physicians can order materials by contacting Dianne Kocourek Ploetz at the Minnesota Department of Health, Lead Program, 925 Delaware Street SE, PO Box 59040, Minneapolis, MN 55459-0040; 612/627-5018. Allow five to six weeks for delivery.

Materials for Health Professionals

- "Preventing Lead Poisoning in Young Children," U.S. Centers for Disease Control, 1991. This document features a thorough description of the new multi-tier approach to the lead issue. A detailed discussion of the reduced blood lead action level, appropriate interventions, and the latest treatments are featured.

- "Strategic Plan for the Elimination of Childhood Lead Poisoning," U.S. Department of Health and Human Services, 1991. This comprehensive plan outlines the

first five years of a 20-year plan to end childhood lead poisoning. A cost-benefit analysis of preventing lead exposure and detailed research and programming agendas are included in this document. Limited to two copies per order.

- "Manual for the Identification and Abatement of Environmental Lead Hazards," Lawrence Chadzynski, R.S., M.P.H. This manual identifies common sources of lead exposure, provides guidelines on conducting an environmental assessment of a residence, and identifies lead abatement methods. Limited to two copies per order.

- "Lead Poisoning and Children," Health and Environment Digest, 1991. This 16-page booklet provides an excellent overview of the lead poisoning issue.

Community Education Fact Sheets

These materials are suggested for people working with young children, parents, and the general public.

- "Finding Lead in the Home: What is Lead Poisoning?" Describes how a child is exposed to lead, defines lead poisoning, and identifies the groups at highest risk.

- "Finding Lead in the Home: Facts About Lead Poisoning." Outlines guidelines for testing young children for overexposure to lead and suggests practical tips to prevent lead poisoning.

- "Finding Lead in the Home: Common Sources of Lead." Identifies common sources of lead that can be found in the home and provides tips to prevent overexposure.

- "Lead: A Health Problem for Our Children." A brief overview of the lead poisoning issue. This brochure is available in either English or Spanish (please note which version you would like).

- "Lead Abatement: Facts You Should Know." Describes the pros and cons of commonly used methods to remove lead sources from the home and specifies health precautions to be utilized during the abatement process.

- "Clean Up of Lead Dust." A one-page fact sheet that details the methods of cleaning up lead dust. Lead dust is a common source of lead exposure for young children.

- "Lead Poisoning." Written in the Hmong language, this 12-page illustrated booklet describes what lead poisoning is and what its health effects are. The booklet also provides practical lead poisoning prevention tips.

Videos

These video and slide presentation educational materials are available at no charge for two-week loans.

- "Lead Poisoning." This 22-minute video in the Hmong language describes what lead poisoning is and is not and how a child can become lead poisoned. It also gives practical tips to prevent lead poisoning. An English script is provided.

- "Lead in the Blood." This 20-minute video, also in the Hmong language, shows the sequence of events that will occur once a child has been diagnosed as lead poisoned. This videotape is for use with the parents or other concerned adults who live with a child who has been lead poisoned. An English script accompanies the video.

- "Lead Poisoning: A Health Problem for Our Children." This 30-minute slide presentation is designed for health professionals to use when giving an educational presentation to the community. It is accompanied by a detailed script. The definition of lead poisoning and the associated health effects, prevention strategies, and the importance of screening high-risk children are discussed in the presentation.

up of their environments. Blood lead levels above 45 µg/dL constitute a medical emergency and require immediate hospitalization of the child and commencement of chelation therapy.

Screening by itself is inadequate.⁵ Diagnosis, treatment, and follow-up must occur, along with environmental abatement. The most important treatment is removing the source of lead from the child's environment. Chelation therapy is of secondary importance (see also "Chelation Therapy to Treat Lead Toxicity in Children," page 25).

Since most of the lead that children absorb comes from their immediate surroundings, safe, affordable housing is critical to the long-term eradication of this problem. According to a recent Minneapolis-based *Star Tribune* article, only half the need for affordable housing is being met by the supply in the Twin Cities area.⁶ Thus, any program for the prevention of excess lead absorption by children must devote substantial resources to supplying safe housing.

The number of Minnesota children who would need lead abatement of their environments is probably manageable. At Group Health thus far, about 0.7% of screened children have had blood lead levels at or above 15 µg/dL. Even if we triple that number to allow for underrepresentation of high-risk children, only about 2% of metro-area children would be expected to need management of their environments. In Minneapolis and St. Paul, where there are roughly 60,000 children age 6 or younger, this would amount to about 1,200 children. Under the proposed lead-toxicity-reduction program, this number should eventually drop to an estimated 200 children, about one-sixth of the current cohort.

Conclusion

Several unknowns persist concerning lead toxicity and its treatment, among them, 1) the epidemiology of the problem, especially the prevalence of low-level excess lead absorption in children at all levels of risk, 2) the central nervous system toxicity of lead at very low blood levels, and 3) the effectiveness and cost-effectiveness of various forms of environ-

mental abatement and medical treatment. However, these uncertainties should not prevent the medical and public health communities in our state from taking steps to eradicate the problem. We have within our grasp the potential to eliminate lead poisoning among Minnesota children. What we need now is effective, coordinated action. MM

Acknowledgment

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James Nordin is a pediatrician at Group Health, Inc., in St. Paul, and is an assistant clinical professor at the University of Minnesota Medical School. He is a co-principal investigator in a Twin Cities prevalence study of lead poisoning that has been funded by the Minnesota Department of Health.

REFERENCES

1. Needleman HL, Gatsonis G. Low-level lead exposure and the IQ of children: a meta-analysis of modern studies. *JAMA* 1990;263:673-8.
2. McMichael AJ, Baghurst PA, Wigg NR, Vimpani GV, Robertson EF, Roberts RJ. Port Pirie Cohort Study: environmental exposure to lead and children's abilities at the age of four years. *N Engl J Med* 1988;319:468-75.
3. Bellinger D, Leviton A, Waternaux C, Needleman HL, Rabinowitz M. Longitudinal analysis of prenatal and postnatal lead exposure and early cognitive development. *N Engl J Med* 1987; 316:1037-43.
4. Centers for Disease Control. Preventing lead poisoning in young children: a statement by the Centers for Disease Control. Atlanta, Georgia: US Department of Health and Human Services, 1991.
5. Frankenburg W, Camp B. Pediatric screening Tests. Springfield, Illinois: Charles C Thomas, 1975:9-21.
6. Lack of low income housing in the Metropolitan area. *Minneapolis Star Tribune* 1992 August 4;Sect. A:1.

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Chelation Therapy to Treat Lead Toxicity in Children

Kent Wegmann, M.D.

ABSTRACT

The most recent Centers for Disease Control guidelines recommend routine screening of children for lead exposure. The CDC recommends close lead-level monitoring of children with lead levels greater than 10 µg/dL. The indications for chelation therapy have not changed. Identification and removal of sources of lead exposure are equally as important as chelation therapy. Experimental data have raised concerns about potential central nervous system effects of the most widely used chelating agent, edetate calcium disodium. A newly licensed chelating agent, succimer, appears to have fewer side effects, appears to be more effective, and has the advantage of oral administration. Indications for its use are somewhat limited but may be expanded as experience with its use increases.

Lead has long been known to be toxic. In mammals, the primary sites of toxicity are the nervous system, the hematopoietic system, and the kidneys. The risk of toxicity is assumed to be related to both the severity and the length of exposure. Children are at greater risk for neurologic defects from lead exposure, and priority is given to identifying and treating them. There is an increasing body of research raising concerns about lead's effects on central nervous system functions in children at levels previously considered safe.

Screening for Lead Exposure

Currently, the Centers for Disease Control recommends screening all children for lead exposure.¹ Inquiry about potential lead exposure should begin at 6 months of age and continue routinely up to 6 years of age. Of course, if lead poisoning is suspected in older children, these children should also be assessed. If there are risk factors for undue lead exposure, blood lead measurements should be obtained as early as 6 months of age. Children without identifiable risk factors should have blood lead measurements done routinely at 1 and 2 years of age. Ongoing assessment of risk factors for exposure to lead and repeat lead measurements, if indicated, should continue up to 7 years of age.

When children are identified with blood lead levels greater than 25 µg/dL they should be evaluated further to determine the need for chelation. These children's environments should also be evaluated to identify and remove the source of lead exposure. This is as important as treatment to reduce their blood lead levels. Giving chelation therapy without also eliminating the source

of lead may only result in a cycle of repeated chelation to bring down lead levels that become elevated when the child is re-exposed to lead.

Treating with Chelators

Lead is toxic because it binds to nitrogen, oxygen, or sulfur within molecules and interferes with normal biochemical function. Chelating agents competitively bind lead, removing it from biologically active molecules. Once bound to the chelating agent, the lead is then excreted from the body, primarily in the urine. Chelators are not specific for lead and can bind other biologically important ions, such as calcium, copper, zinc, and iron. Chelating agents are chosen to maximize beneficial effects and minimize harmful effects. Elevated blood lead levels will naturally decline without treatment if excess lead exposure is terminated. Chelation is given to hasten this process, which otherwise may take years. The goal is to decrease the blood lead level as quickly as possible to an acceptable level. Currently, this level is defined as less than 25 µg/dL.

Three chelating agents are licensed by the Food and Drug Administration for use in lead chelation. These are BAL (British Anti-Lewisite, dimercaprol, 2-3 dimercaptopropanol), CaNa₂ EDTA (edetate calcium disodium), and succimer (meso-2-3 dimercaptosuccinic acid, dimercaprol, DMSA). Another chelating agent, penicillamine, is effective for chelating lead but is not approved by the FDA for this use. BAL is given by intramuscular injection; CaNa₂ EDTA can be given intramuscularly or intravenously; succimer and penicillamine are given orally. CaNa₂ EDTA is effective if given orally but can promote uptake of lead from the intestine, so it is not given this way.

Management of children with elevated lead levels is well outlined by Piomelli et al.² Most of the authors' recommendations still hold true, and the article is a valuable reference. Piomelli's article does not discuss succimer, however, since it was not licensed at the time the article was written. Some authors now recommend chelating children without doing a chelation provocation test (also known as chelation provocation) if their lead level is 40 µg/dL or greater.³ In general, the greater the blood lead level, the more vigorous the chelation therapy should be. The presence or absence of symptoms that can be attributed to lead should also be considered.

CaNa₂ EDTA has been used much more extensively than BAL, since BAL is reserved for use only with lead levels greater than or equal to 70 µg/dL or in the presence of encephalopathic symptoms, even if the lead levels are less than 70 µg/dL. Children without encephalopathy and with lead levels less than 70 µg/dL are not given BAL, which is not used by itself; it is always given in combination with CaNa₂ EDTA.

Performing the Chelation Provocation Test

Children with lead levels of 25 to 39 µg/dL need a chelation provocation test before receiving complete courses of chelation. A lead level in this range does not necessarily mean a significant amount of lead is in the body that can be removed by chelation. Currently, it is not recommended that children with lead levels less than 25 µg/dL receive provocation testing or chelation. Children with lead levels of 10 to 25 µg/dL should be monitored periodically to make sure their lead levels are stable or decreasing.

To perform the chelation provocation testing, one dose of CaNa₂ EDTA is given, and urine is collected for eight hours beginning at the time the dose is given. The total amount of lead excreted into the urine in this eight-hour period is compared with the dose of CaNa₂ EDTA given. This is expressed as the ratio of micrograms of lead excreted over the

dose of CaNa₂ EDTA in milligrams (micrograms lead/milligrams CaNa₂ EDTA).

Opinions differ about what ratio is considered significant and at what level a challenge test should be done. Piomelli et al.² recommend that children with a ratio greater than 0.7 receive five days of CaNa₂ EDTA chelation therapy, and that children under age 3 with a ratio of 0.6 to 0.69 receive an abbreviated, three-day course of chelation therapy. Children with ratios less than 0.6 are not chelated, but their lead levels should be monitored; if elevated levels persist, CaNa₂ EDTA provocation testing should be repeated.

Weinberger et al.⁴ recommend provocation testing for lead levels of 40 to 60 µg/dL, and they define a positive result as a ratio greater than or equal to 0.5. They make no recommendation regarding the child's age. Markowitz and Rosen⁵ define a positive test as one with a ratio greater than or equal to 0.7, or an amount of lead greater than or equal to 200 µg excreted in eight hours.

Interpretation of mobilization testing can also be influenced by the child's iron status.⁶ Iron-deficient children excrete less lead during provocation testing than iron-sufficient children. The difference is small but needs to be considered in children with borderline negative CaNa₂ EDTA provocation tests. Testing should be repeated in these children when their iron status has been repleted. Preferably, the children should be iron replete before this test is performed.

There is some concern about the advisability of performing provocation tests at all.^{7,8} Experimental evidence in rats shows that one dose of CaNa₂ EDTA initially mobilizes lead into the brain; after subsequent doses, the brain levels decrease, but only to a level similar to that before chelation.⁸ The design of this experiment was similar to the actual process of chelation used in children. In fact, clinical data suggesting that this may occur in children has been noted in the treatment of encephalopathic children with CaNa₂ EDTA alone. Some encephalopathic children experienced temporary worsening of

neurologic symptoms when chelated with CaNa₂ EDTA alone. Combining BAL and CaNa₂ EDTA in encephalopathic children seems to eliminate this problem. Despite the experimental data in rats, however, there is no clinical data to support the concept that children have been harmed by CaNa₂ EDTA provocation testing.

Using Succimer as a Chelator

The FDA recently licensed succimer for chelation of lead levels greater than 45 µg/dL. Succimer, which is administered orally, has a number of advantages over CaNa₂ EDTA and BAL. Studies in children are limited, but the results have uniformly been good, and the treatment appears to lack serious side effects.

When the FDA licensed succimer, three studies, involving a total of 50 children, had evaluated its use in treating lead exposure in children.⁹⁻¹¹ Adverse effects were few and, when they occurred, relatively mild. The majority of side effects were related to the gastrointestinal tract (nausea, vomiting, diarrhea, and decreased appetite). Serum transaminase elevations have also been reported, but they have been mild and transient and have occurred primarily in adults.

Succimer appears to be more specific for lead than other available chelating agents and results in a much lower loss of other ions, such as zinc, iron, calcium, and copper, in the urine than CaNa₂ EDTA.⁹

Treatment is given every eight hours for the first five days, and then every 12 hours for 14 more days. Studies evaluating a five-day course of treatment demonstrated a greater decrease in blood lead levels than with CaNa₂ EDTA. After treatment with succimer was discontinued, the lead levels rebounded, but not to as great a degree as with CaNa₂ EDTA. Further studies showed that a lower dose for 14 more days decreased the amount of rebound in lead levels that occurred after cessation of therapy.¹¹ Lead levels need to be monitored after therapy ends, and repeat therapy should be given when necessary. The recommended interval between courses of therapy

with succimer is two weeks.

Succimer does not appear to cause mobilization of lead into the brain during chelation therapy, as does CaNa_2EDTA . A study done in rats¹² showed that brain lead levels decreased with the first dose and that this decrease was sustained during the five-day course of therapy.

Another advantage of succimer is it does not facilitate lead absorption from the gastrointestinal tract,¹³ as may occur with CaNa_2EDTA and penicillamine. Also, there is no adverse interaction between succimer and iron, as has been demonstrated with BAL.¹⁴

When to use succimer

Currently, there are no clear guidelines for when to use succimer rather than CaNa_2EDTA . The only guideline suggested by the manufacturer is that succimer is indicated for lead levels greater than 45 $\mu\text{g}/\text{dL}$. The manufacturer does not define the upper range of lead levels for which it can be safely used. Succimer has been safely used to treat children with lead levels as high as 69 $\mu\text{g}/\text{dL}$,¹⁴ a level that is unlikely to cause encephalopathy. This same report also provides limited data about three children who received succimer to treat lead levels greater than 70 $\mu\text{g}/\text{dL}$. The children's exact lead levels are not specified, and the authors do not comment about the presence or absence of neurologic symptoms. There apparently are no data on the use of succimer in children with encephalopathy. One study reports safely treating three adults with lead encephalopathy with succimer alone.¹⁵ One researcher¹² has suggested, but not evaluated, the use of succimer and CaNa_2EDTA together. The manufacturer, however, does not recommend the use of succimer with other chelating agents.

Currently, it seems wise to treat encephalopathic children and those with lead levels greater than 70 $\mu\text{g}/\text{dL}$ with the combination of BAL and CaNa_2EDTA . Children with lead levels less than 70 $\mu\text{g}/\text{dL}$ who demonstrate symptoms related to lead toxicity should also receive BAL and CaNa_2EDTA together. Children with lead levels less than 70 $\mu\text{g}/\text{dL}$

and without symptoms could receive succimer alone.

Treating lead levels of 25 to 44 $\mu\text{g}/\text{dL}$ is the most problematic. There is no evidence that chelation therapy can reverse any adverse effects that lead at these levels might have on intelligence.¹ Also, there are concerns about the potential effects the traditional approach of mobilization testing might have on brain lead levels.^{7,8} All experimental and clinical evidence to date suggests that succimer could safely be used, but these data are from small numbers of children and not sufficient for the FDA to approve its use for lead levels in this range.

It might seem reasonable to perform lead mobilization testing with succimer, but the data conflict regarding the practicality of this approach. In studies with rats, no correlation was found between lead burden in bone and various soft tissues and the amount of lead excreted in the urine after a single dose of succimer.¹² Conversely, one report¹⁶ documents increased urine excretion of lead after a single dose of succimer in a human subject. It should be noted, however, that this information is from a study of just one patient. The authors of this study concluded that a mobilization test using succimer could be used to guide further therapy with this agent. Obviously, more study of this possibility is necessary before it can be widely used.

Further study of succimer should clarify its use in asymptomatic children with lead levels in this lower range. Succimer certainly seems to have the potential to provide effective and more specific therapy with fewer side effects.

MM

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REFERENCES

- Centers for Disease Control: Preventing lead poisoning in young children: a statement by the Centers for Disease Control. Atlanta, Georgia: U.S. Dept. of Health and Human

Services, 1991.

- Piomelli S, Rosen JF, Chisolm JJ Jr, Graff JW. Management of childhood lead poisoning. *J Pediatr* 1984;105:523-32.
- Markowitz ME, Rosen JF. Need for the lead mobilization test in children with lead poisoning. *J Pediatr* 1991;119:305-10.
- Weinberger HL, Post EM, et al. An analysis of 248 initial mobilization tests performed on an ambulatory basis. *Am J Dis Child* 1987;141:1266-70.
- Markowitz ME, Rosen JF. Assessment of lead stores in children: validation of an 8 hour CaNa_2EDTA provocative test. *J Pediatr* 1984;104:337-41.
- Markowitz ME, Rosen JF, Bijur PE. Effects of iron deficiency on lead excretion in children with moderate lead intoxication. *J Pediatr* 1990;116:360-4.
- Chisholm JJ. Mobilization of lead by calcium disodium edetate, a reappraisal. *Am J Dis Child* 1987;141:1256-7.
- Cory-Slechta DA, Weiss B, Cox C. Mobilization and redistribution of lead over the course of calcium disodium ethylenediamine tetraacetate chelation therapy. *J Pharmacol Exp Ther* 1987;243:804-13.
- Graziano JH, Lolocono NJ, Meyer P. Dose-response study of oral 2,3-dimercaptosuccinic acid in children with elevated blood lead concentrations. *J Pediatr* 1988;113:751-7.
- Montalvan J, Okose P, Marcus S. Outpatient chelation therapy of 24 patients with lead intoxication by dimercaptosuccinic acid (DMSA), abstracted. *Vet Hum Toxicol* 1990;4:343.
- Data on File McNeil Consumer Product Company, a Division of McNeil-PPC, Inc.
- Cory-Slechta D. Mobilization of lead over the course of DMSA chelation therapy and long-term efficacy. *J Pharmacol Exp Ther* 1988;246:84-91.
- Kapoor SC, Wielopolski L, Graziano JH, Lolocono NJ. Influence of 2,3-dimercaptosuccinic acid on gastrointestinal lead absorption and whole-body lead retention. *Tox App Pharmacol* 1989;97:525-9.
- Graziano JH, Lolocono NJ, Moulton T, et al. Controlled study of Meso-2,3-dimercaptosuccinic acid for the management of childhood lead intoxication. *J Pediatr* 1992;120:133-9.
- Fournier L, Thomas G, Garnier R, et al. 2-3-Dimercapto succinic acid treatment of heavy metal poisoning in humans. *Med Toxicol* 1988;3:499-504.
- Bentur Y, Brook JG, Behar R, Taitelman U. Meso-2,3-dimercaptosuccinic acid in the diagnosis and treatment of lead poisoning. *Clin Toxicol* 1987;25:39-51.

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Lead Levels Among Pregnant Women in Hennepin County

Diane J. Fredeen, M.P.H., Edward P. Ehlinger, M.D., Stephen H. Cruikshank, M.D., Janice R. Godes, M.P.H., Jane E. Braun, M.S., and Amos S. Deinard, M.D.

ABSTRACT

The purpose of this study was to determine the blood lead levels (Pb-B) of urban pregnant women with low incomes and/or living in areas with heavily traveled roads, dilapidated housing, and industrial plants. We measured blood lead in 1,055 pregnant Minneapolis-area women at entry to prenatal care and in one-third of the sample during the second half of pregnancy. The mean Pb-B level of the first sample (n=1,055) was 1.83 ± 1.83 $\mu\text{g/dL}$; of the second sample (n=375), 1.99 ± 1.92 $\mu\text{g/dL}$. Only one woman had a Pb-B level greater than 12.0 $\mu\text{g/dL}$, which was the result of occupational exposure. The low lead levels found in this study indicate that it is not necessary to routinely screen pregnant women for elevated Pb-B levels in our geographic area. Rather, women should be screened via an environmental questionnaire to ascertain the risk of lead exposure.

Exposure to lead has been identified as a serious health problem in the United States.¹ Young children and fetuses appear to be at the greatest risk if exposed to lead.²⁻³ Lead crosses the placental barrier freely from mother to fetus.⁴⁸ Risk to the fetus has been estimated by measurements of maternal blood lead (Pb-B). In July 1988, the Agency for Toxic Substances and Disease Registry stated that, based on a critical review of the literature, in-utero exposure produces dangerous effects on the fetus at maternal Pb-B levels of 10 to 15 $\mu\text{g/dL}$.⁹

Several prospective studies have examined the effects of lead on the fetus, and a wide range of maternal lead levels have been reported.^{7,8,10} Ernhart et al. measured Pb-B levels in 185 samples of maternal blood (taken at delivery) and 162 samples of cord blood drawn from members of a cohort of mother-infant pairs.⁷ The mean maternal Pb-B level was 6.5 $\mu\text{g/dL}$, and the mean cord Pb-B level was 5.8 $\mu\text{g/dL}$. Dietrich et al. measured Pb-B levels in pregnant women at their first prenatal visit;³ the mean maternal Pb-B level was 8.0 $\mu\text{g/dL}$ (n=266). The newborns had their Pb-B drawn on postnatal day 10; the mean newborn Pb-B level was 4.6 $\mu\text{g/dL}$ (n=302). Another study examining both the prenatal and postnatal effects of environmental lead was conducted in Port Pirie, Australia.^{8,10} (Port Pirie is located near Australia's largest lead smelter.) A cohort of 537 children born from 1979 to 1982 was studied. Blood samples were obtained from mothers antenatally, at delivery (maternal and cord), and from infants at various ages. In mid-pregnancy, the maternal mean Pb-B level was 9.1 $\mu\text{g/dL}$.

Various researchers have also examined the kinetics of lead during

pregnancy. Alexander and Delves, in a cross-sectional study, found maternal Pb-B levels to decrease significantly over the course of pregnancy.¹¹ However, in another cross-sectional study, no changes in mean Pb-B levels were found during the first, second, and third trimesters.⁶ In a longitudinal study of 12 women, Barltrop found no consistent downward trend; however, no measurements were made before 10 weeks' gestation.¹² In contrast, data from Ryu et al. suggest a significant drop in maternal Pb-B levels over the first eight weeks of pregnancy.¹³

Because the data are inconclusive regarding Pb-B during pregnancy, we conducted a study of maternal blood lead in Minneapolis and Hennepin County, Minnesota. The population selected for evaluation had many of the risk factors associated with lead exposure in children, including poverty, dilapidated housing, racial or ethnic minority status, lead plumbing in housing and/or schools, residence near heavily traveled highways, poor nutrition, low education level of parents, and employment of parents in a lead-related industry. Our study not only determined mean and median Pb-B levels, but also examined these levels two times during pregnancy in those patients from whom paired samples were obtained.

Methods

The population screened for blood lead was drawn from pregnant women receiving prenatal care from seven Minneapolis clinics and one suburban Hennepin County clinic. The participating clinics provide prenatal care to minority women or women with low incomes who reside in areas where environmental lead exposure may be increased as a result of housing conditions, heavy traffic, or in-

dustry. Participation in the study was voluntary; written informed consent was obtained from all participants. We received approval for human experimentation from the Hennepin County Medical Center Human Subjects Resource Committee and the University of Minnesota Committee on the Use of Human Subjects in Research. Collection of blood samples began in December 1988 and concluded in August 1990.

We measured maternal Pb-B levels at entry to prenatal care and collected second samples in the second half of pregnancy, usually at either the 28- or 36-week prenatal visit, depending on the site. We collected only one specimen from women who initiated care after 28 weeks' gestation.

The Minneapolis Health Department Laboratory analyzed blood samples for lead using anodic stripping voltametry on an ESA 3010 trace metals analyzer (Environmental Sciences Associates, Inc., Bedford, Mass.). The specimens were collected in EDTA vacutainer tubes and tested once weekly. The laboratory assessed precision and accuracy using Centers for Disease Control proficiency samples.

If the maternal Pb-B level exceeded 12.0 µg/dL, the following interventions occurred: the Environmental Health Division of the Minneapolis Health Department inspected the home for potential lead sources, public health nurses made home visits, an obstetrician conducted a physical examination, and an occupational therapist made developmental assessments of the infant at 3 and 6 months of age. Cord Pb-B levels were also obtained.

We performed statistical analysis using the following tests of significance: Kruskal-Wallis, Chi square, linear regression, and multiple regression. We also used t-test for differences in means. Significance was defined as $p < 0.05$.

Results

Patients

At their first prenatal visit, 1,055 women volunteered to participate in the study. Their mean age was 24.0 ± 5.6 years (range, 13.8 to 42.7

Table 1

Race/ethnicity of 1,055 study participants

Race	Frequency	Percent
White	395	37.4
Black	347	32.9
American Indian	175	16.6
Hmong	68	6.4
Laotian	10	0.9
Cambodian	8	0.8
Hispanic	8	0.8
Vietnamese	5	0.5
Other/unknown	39	3.7
	1,055	100.0

years). Thirty-seven percent were white, and 33% were black (Table 1). Nearly three-fourths of the women were single or separated (Table 2).

Seventy-one percent were unemployed (Table 3). Slightly more than half had at least 12 years of education (Table 3). Eighty-five percent of the participants lived in Minneapolis, with 28% attending the Minneapolis Health Department prenatal clinic. Seventy-one percent of the participants resided in areas where 82% of the 1989 Minneapolis childhood lead cases were found (Hennepin County Community Health Department, unpublished data).

First blood lead level

All 1,055 participants gave a blood sample at their first prenatal visit. The mean weeks' gestation at this time was 16.7 ± 7.9 weeks (range, 1 to 38 weeks). The mean Pb-B level was 1.8 ± 1.8 µg/dL (range, 1.0 to 16.0 µg/dL). Only one individual had an elevated Pb-B level (16.0 µg/dL) at 10 weeks' gestation. When she was retested at 17 weeks' gestation, this level had dropped to 2.0 µg/dL.

Married women had a higher

Table 2

Marital status

	Frequency	Percent
Never married	684	64.8
Married	262	24.8
Separated	43	4.1
Divorced	40	3.8
Widowed	2	0.2
Unknown	24	2.3
	1,055	100.0

Table 3

Patient Demographics

Employment	Frequency	Percent
Unemployed	753	71.4
Employed	281	26.6
No data	21	2.0
	1,055	100.0
Education	Frequency	Percent
<10 years	182	17.3
10 years	118	11.2
11 years	155	14.7
≥12 years	575	54.5
No data	25	2.4
	1,055	100.0

Pb-B level than single women (mean Pb-B of 2.1 µg/dL versus 1.7 µg/dL; Kruskal-Wallis $H=7.95$; $p=0.004$).

Southeast Asians had a higher mean Pb-B value (2.1 µg/dL) than non-Southeast Asians (1.8 µg/dL; Kruskal-Wallis $H=4.42$; $p=0.03$).

There was an inverse relationship between weeks' gestation and the mean value for the first Pb-B

specimen. The mean Pb-B level during the first 18 weeks of pregnancy was 2.0 $\mu\text{g/dL}$, as compared with a mean of 1.5 $\mu\text{g/dL}$ during the second half of pregnancy (Kruskal-Wallis $H=17.86$; $p=0.00002$). This relationship was confirmed by linear regression analysis ($p<0.001$).

Despite these statistically significant differences, their clinical significance is questionable.

Second blood lead level

The mean weeks' gestation for the 375 women who submitted a second blood sample was 35.0 ± 3.0 weeks (range, 21 to 44 weeks). The mean Pb-B level was 2.0 ± 1.9 $\mu\text{g/dL}$ (range, 1.0 to 12.0 $\mu\text{g/dL}$). For a number of reasons, only 35.5% of the patients had a second sample drawn; some patients were lost to follow-up, some began prenatal care late in the pregnancy, and some had preterm delivery.

There was no significant change in the mean Pb-B levels for the paired samples over the study period.

Discussion

This study found low blood lead levels in a population of pregnant women whose most common demographic characteristics were low income, minority status, single marital status, unemployment, and urban dwelling. The present results stand in opposition to what has been described in larger urban centers in the United States.^{3,7}

Blood samples drawn at the time of initiation of prenatal care showed a mean Pb-B level of 1.8 $\mu\text{g/dL}$. Although blood lead levels were higher in married women and in those sampled earlier in pregnancy, these differences do not appear to be clinically significant. There are several possible explanations for the higher Pb-B levels in samples drawn earlier in pregnancy, some of which include lead crossing the placenta and being taken up by the developing fetus, normal hemodilution that occurs during pregnancy, and bone sequestration occurring in mothers. It is unclear why married women had higher mean blood lead values. However, the difference between the means (first Pb-B level) for married and

single women was only 0.4 $\mu\text{g/dL}$, and neither mean was clinically significant (2.1 and 1.7, respectively).

Only one participant in the study had a blood lead level at or above the intervention level. Her blood lead level was 16.0 $\mu\text{g/dL}$ at 10 to 11 weeks' gestation. All of the lead samplings the environmental specialist took from her home were negative for lead. The environmental investigation determined that the probable source of her lead exposure was occupational. After her employer moved her away from the lead solder at work, her repeat blood lead was 2.0 $\mu\text{g/dL}$ at 17 and 36+ weeks' gestation. She delivered a full-term, healthy baby girl who weighed 4,000 grams. The cord blood lead was 1.0 $\mu\text{g/dL}$. The infant's development (Bayley Scales of Infant Development) was normal at 3 and 6 months of age.

Conclusion

We conclude that infants born to urban women (in our study, most of whom resided in areas associated with high lead levels in children residents) are not necessarily at risk of intrauterine exposure to lead. We do not recommend routine blood lead screening for pregnant women in our geographic area, but instead believe that risk should be ascertained via an environmental history or questionnaire.

The one study participant with an elevated Pb-B level discussed her concern about her occupational exposure to lead at her first prenatal visit. Her awareness of lead as a potential hazard highlights the importance of education for the general population—particularly for women of childbearing and childraising age. This education should take place through mass media campaigns, pediatric and ob/gyn clinics, hospitals, schools, and health departments.

We suggest that researchers in other urban areas survey Pb-B levels in inner-city pregnant women to determine whether elevated levels are present. If so, demographic characteristics associated with these levels should be determined to help further identify which groups of women should be targeted for future screening. Since only one patient had a

Pb-B level greater than 12.0 $\mu\text{g/dL}$ (intervention level for our study), we were able to assess only one infant's development. Further studies are needed to explore the effects on fetal development of maternal blood lead at lower levels.

MM

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REFERENCES

1. Mushak P, Davis JM, Crocetti AF, Grant LD. Prenatal and postnatal effects of low-level lead exposure: integrated summary of a report to the U.S. Congress on childhood lead poisoning. *Environ Res* 1989;50:11-36.
2. Needleman AL. The persistent threat of lead: medical and sociological issues. *Curr Prob Pediatr* 1988;12:697-744.
3. Dietrich KN, Kraft KM, Bornschein RL, et al. Low-level fetal lead exposure effect on neurobehavioral development in early infancy. *Pediatrics* 1987;80:721-30.
4. Lauwerys R, Buchet JP, Roels H, Hubermont G. Placental transfer of lead, mercury, cadmium and carbon monoxide in women. *Environ Res* 1978;15:278-89.
5. Tsuchiya H, Mitani K, Kodamak, Nakata T. Placental transfer of heavy metals in normal pregnant Japanese women. *Arch Environ Health* 1984;39:11-7.
6. Gershanik JJ, Brooks GG, Little JA. Blood lead levels in pregnant women and their offspring. *Am J Obstet Gynecol* 1974; 119: 508-11.
7. Ernhart CB, Wolf AW, Kennard MJ, Erhard P, Filipovich HF, Sokol RJ. Intrauterine exposure to low levels of lead:

Continued

the status of the neonate. Arch Environ Health 1986;41:287-91.

8. Baghurst PA, McMichael AJ, Vimpani GV, Robertson EF, Clark PD, Wigg NR. Determinants of blood lead concentrations of pregnant women living in Port Pirie and surrounding areas. Med J Aust 1987; 146:69-73.

9. Agency for Toxic Substances and Disease Registry. The nature and extent of lead poisoning in children in the United States: a report to Congress. Atlanta: U.S. Department of Health and Human Services, Public Health Service, 1988; DHHS document no. 99-2966.

10. McMichael AJ, Baghurst PA, Wigg NR, Vimpani GV, Robertson EF, Roberts RJ. Port Pirie cohort study: environmental exposure to lead and children's abilities at the age of four years. N Engl J Med 1988;319:468-75.

11. Alexander F, Delves T. Blood lead levels during pregnancy. Int Arch Occup Environ Health 1981;48:35-9.

12. Barltrop D. Transfer of lead to the human fetus. In: Barltrop D, Burland W, eds. Mineral Metabolism in Pediatrics. Oxford: Blackwells, 1969:135-51.

13. Ryu JE, Ziegler EE, Fomon SJ. Maternal lead exposure and blood lead concentration in infancy. J Pediatr 1978;93:476-8.

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MnCare Will Likely Face Legal Hurdles

Stephen P. Lucke, J.D., and Tamara J. Byram, J.D.

The recently enacted Minnesota Health Right Act (the program is now called MnCare) may face certain legal challenges before it is fully implemented. Similar laws have been struck down as conflicting with the federal Employee Retirement Income Security Act (ERISA), and MnCare's financing mechanism has already been challenged in federal court on this ground. The act's financing mechanism may also be subject to constitutional challenges. Although the Legislature drafted MnCare to minimize ERISA and constitutional concerns, it remains to be seen whether the legislation will overcome these expected legal hurdles.

Although the wisdom of MnCare has been hotly debated both before and after its enactment, the law reflects an attempt to reform the availability and delivery of health care to Minnesotans and to control the growth in health care spending. Portions of the act went into effect July 1, 1992, and other provisions will become effective over the next few years. Among other things, MnCare attempts to make state-subsidized health insurance available to the uninsured, provides funding to assist rural health care facilities, and requires health insurance carriers to offer insurance to "small employers" on more favorable terms. MnCare also establishes a regulatory framework for overseeing, administering, and implementing its programs. Various agencies, commissions, and committees are empowered to limit health care spending, establish "practice parameters," which, if followed, will be an absolute defense to malpractice actions, and develop other policies and procedures for the delivery of health care services. In short, MnCare could significantly change

health care delivery in Minnesota.

To finance these programs, the Legislature chose not to levy a general tax. Instead, it created a "Health Care Access Fund," one of the act's more controversial provisions. Un-

"In enacting MnCare,
the Legislature
recognized that it
was treading on
untested ice."

der MnCare, hospitals and health care providers (including physicians) must contribute to the fund by paying a 2 percent tax on their gross revenues, subject to certain exceptions and deductions. The tax on hospitals applies to gross revenues from services provided and goods sold after December 31, 1992, and the tax on other health care providers applies to gross revenues from services provided and goods sold after December 31, 1993. (Insurers, HMOs, and others will contribute to the Health Care Access Fund as well.) Until January 1, 1994, hospitals are expressly authorized to pass on their expenses from this 2 percent tax directly to insurers and other third-party payers (such as self-funded benefit plans), but they cannot disclose the tax on patients' bills. Even after January 1, 1994, the law does not expressly prohibit hospitals and health care providers from passing the tax on to patients or third-party payers.

ERISA Hurdles

Certainly a significant legal hurdle facing MnCare is whether its provisions violate ERISA. Enacted by Congress in 1974 to protect employees who participate in their employers' or unions' welfare benefit and pension plans (including health care plans), ERISA (with several exceptions) prevents states from passing laws that even "relate to" employee benefit plans, also known as ERISA plans. Rather, Congress has chosen to "preempt the field" in setting uniform standards and regulations for the ERISA plans, whether those plans consist of purchased health care insurance or are self-funded by the employer. In addition, ERISA requires that employee benefit plans be for the sole benefit of the plans' participants and beneficiaries. Because MnCare's comprehensive regulation of health care services will undoubtedly affect ERISA plans, serious questions have been raised as to whether those provisions will be "preempted" and thus invalid.

Evidently, in enacting the new law, the Legislature recognized that it was treading on untested ice. The bill itself is unusual in that it specifically directs the state to apply to federal authorities for an exemption from ERISA's preemption provisions. To this end, the State Health Care Financing Equity Act was recently introduced in Congress; if enacted, it would exempt states from ERISA's preemption provisions when financing legislation such as MnCare. However, unless and until such legislation is passed, the act will likely face challenges in the courts.

The Legislature's fears that MnCare would be challenged as violating ERISA were well-founded. In August of this year, the Twin City

Pipe Trades Welfare Trust sued in federal court to prevent the 2 percent hospital and provider tax from being passed on to the trust. The trustees allege that, as a self-funded employee benefit plan, the trust must pay its

“Statutory schemes similar to MnCare’s have not fared well in the courts.”

participants’ hospital and health care bills, and is thus subject to the 2 percent tax that may be passed on to third-party payers. The trustees claim that MnCare’s financing mechanism is preempted by ERISA (as well as federal labor legislation) because the trust now has additional financial and regulatory obligations not faced by plans in other states and because its funds must be diverted for the benefit of people who are not participants in the trust, such as the uninsured. For relief, the trustees request that the trust be exempt from bearing the financial and regulatory burdens of MnCare. If successful, the trust, and by extension other ERISA plans, could be exempt from the 2 percent tax, which would undercut MnCare’s financing mechanism.

In other states, statutes that require ERISA plans to bear the financial burden of medical care in excess of actual costs are also being challenged. For example, New York’s recent legislation imposing surcharges on inpatient hospital bills covered by commercial insurers, self-funded plans, and HMOs is being challenged in federal court as violating ERISA.

Statutory schemes similar to MnCare’s have not fared well in the courts. Earlier this year in *United Wire, Metal & Machine Health and Welfare Fund v. Morristown Memorial Hospital*, a federal court in New Jersey held that ERISA preempted New Jersey’s law requiring that hospitals charge rates in excess of patients’ actual hospital costs to help compensate for indigent care, bad debts, and other costs. Like MnCare,

the law did not expressly mention ERISA plans, but the court found that it was “related to” such plans and thus preempted because the statutorily imposed charges increased the amounts that ERISA plans paid for their participants’ medical care. Because the increased charges forced the ERISA plans to disregard their express purpose—benefiting only covered employees and their beneficiaries—the law frustrated the plan’s purpose. The court also found that the law subjected the plans to inconsistent regulations from state to state because plan members in other states were not subjected to the additional charges. This ruling is currently on appeal.

In addition, a federal district court in Louisiana found a state statute similar to MnCare preempted in *Bricklayers Local No. 1 Welfare Fund v. Louisiana Health Insurance Association*. The Louisiana statute created a state health insurance association to administer a catastrophic health insurance program and required third-party payers, including ERISA plans, to fund it by paying “service charges” assessed against their covered patients. Reasoning that the statute required ERISA plans to indemnify non-plan beneficiaries (by assessing service charges for their benefit) and singled out plan beneficiaries to pay additional health care fees, the court held the statute preempted by ERISA.

Although MnCare’s financing provisions are similar to laws struck down in New Jersey and Louisiana, the state Legislature clearly drafted MnCare’s provisions to minimize the risk of running afoul of ERISA. In addition to requesting an ERISA exemption from the federal government, the Legislature expressly stated that the act’s financing provisions are “subject to federal law” and expressed its intent that if some of these provisions were found invalid, the remainder should survive. Also, unlike the state statutes imposing increased hospital rates and surcharges that were struck down by the federal courts in New Jersey and Louisiana, MnCare is financed through a “tax” that hospitals and health care providers may, but are not required to,

pass on to third-party payers (although the tax *cannot* be disclosed on patients’ bills).

Notwithstanding the practical reality that third-party payers, including ERISA plans, will ultimately pay these undisclosed taxes, the state might argue that the act’s effect on such plans is only “tenuous, remote, or peripheral,” which, if accepted by a court, would save these provisions from ERISA preemption. Whether Minnesota can indirectly increase rates through an undisclosed “tax” when it cannot directly mandate higher rates and charges will certainly be at the heart of court challenges to MnCare’s financing provisions. Nevertheless, courts have held that, like other forms of state regulation, state taxation laws that affect the structure of an ERISA plan’s payment of benefits are preempted by ERISA.

Constitutional Hurdles

In addition to facing preemption issues under ERISA and federal labor legislation, MnCare’s financing provisions may potentially face challenges under the state and federal constitutions. Constitutional challenges to similar financing schemes elsewhere have met with little success to date, but it is not certain how Minnesota courts would decide these issues.

For example, financing mechanisms that charge insurers and self-funded plans higher fees than others paying for the same medical services arguably deny the former “equal protection of the laws.” Also, taxing only one group—hospitals and health care providers—for the benefit of the general public raises similar issues, including whether such a tax complies with the Minnesota Constitution’s provision that taxes be uniformly levied. Litigants have also challenged financing schemes similar to MnCare’s on the grounds that they constitute a “taking” of property without just compensation, or constitute a denial of due process.

In one recent case, *Coy v. Florida Birth-Related Neurological Injury Compensation Plan*, the Florida Supreme Court narrowly upheld a tax on physicians over objections that it denied them equal protection of the

laws. The challenged tax was levied against only physicians and was used for an insurance fund for infants suffering neurological injuries. By a 4-3 vote, the court upheld the tax. It found it reasonably related to its purpose of providing care for children and theorized that physicians as a group benefited more from the law than the public in general. But Justice Kogan, writing for the dissent, disagreed, arguing: "The legislature has sought to tax primarily physicians to pay for insurance against certain birth-related injuries. This is little different from taxing only school-teachers to pay for new educational facilities, or taxing only licensed psychologists to pay for public mental health care, or taxing only policemen to pay for victims' compensation programs."

"One step further along this doubtful train of logic would lead to the conclusion that society can shift its more onerous tax burdens exclu-

sively onto those minorities or groups that lack a sufficient voice at the state capitol. Political expedience might encourage this practice, since legislators could raise revenue without imposing an unpopular general tax."

Although MnCare has not yet been challenged on constitutional grounds, the constitutional arguments raised against similar statutory schemes indicate that it may yet face constitutional challenges.

Conclusion

As MnCare is implemented in the coming months, the state will undertake the task of providing health care to the uninsured, containing health care costs, and administering the many programs the legislation has created. In addition, MnCare must overcome the court challenge testing its financing provisions, and it may face constitutional challenges before it is finally implemented. MM

The preceding general discussion is intended to inform readers of some potential problems facing MnCare. It is not intended as legal advice and should not be relied upon as such.

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The Minnesota Limited Liability Company Act

Physician Groups Likely to Find New Law Beneficial

John K. Steffen, J.D.

Minnesota businesses and professional practices can be organized and operated as limited liability companies rather than as corporations or partnerships beginning January 1, 1993. A limited liability company (LLC) is a new, hybrid form of business organization that is treated like a partnership for tax purposes but affords owners limited liability like that available to corporate shareholders. Businesses formed by physicians and other health care professionals will likely be among those benefiting from Minnesota's new LLC law.

History of the LLC

Wyoming enacted the first LLC statute in 1977. For more than 10 years, the Internal Revenue Service studied the question of whether an organization could be classified as a partnership if no owner of the organization was personally liable for its debts and obligations. Finally, in 1988, the IRS ruled that an LLC formed under the Wyoming statute would be treated as a partnership for federal tax purposes.

Following the clarification of the tax status of LLCs in 1988, significant interest developed in the LLC as a business entity. As of July 1992, laws authorizing LLCs have been enacted in 16 states,* and similar legislation has been proposed in approximately 20 other states.

*Wyoming (1977), Florida (1982), Colorado (1990), Indiana (1990), Kansas (1990), Virginia (1991), Utah (1991), Texas (1991), Nevada (1991), Georgia (1992), Iowa (1992), Louisiana (1992), Maryland (1992), Minnesota (1992), Oklahoma (1992), and West Virginia (1992).

Why Use an LLC?

The movement to LLCs is primarily tax driven. An LLC is taxed as a partnership, and in most situations it is more advantageous as a tax matter to operate a business or professional

“Businesses formed
by physicians will
likely be among
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Minnesota's new
LLC law.”

practice as a partnership than to operate it as a corporation. This is particularly true of a business or professional practice that 1) anticipates selling its assets at a large gain in the future or 2) is obligated to make significant non-funded retirement payments to retiring owners.

Despite the tax advantages, investors have frequently been reluctant to organize new business ventures as partnerships because of liability concerns. In general, limited partners of a limited partnership enjoy the benefit of limited liability. They risk personal liability, however, if they participate in the control of the partnership's business, and it is often unclear what activities might constitute such participation in control.

To avoid the risk of personal liability associated with partnerships, investors have used S corporations whenever possible. S corporations have no more than 35 shareholders, only one class of stock, and are taxed much like partnerships. Many, but

by no means all, of the tax advantages of a partnership are available to S corporations. It is often impossible, however, to use an S corporation in a sophisticated venture involving multiple parties because of the restrictive S corporation requirements. For example, an S corporation cannot have a corporation or charitable organization as a shareholder, which would preclude the use of S corporations in most joint ventures with hospitals or their affiliates.

No such limitations apply to an LLC. An LLC is a partnership for tax purposes, and under the applicable partnership tax rules there are no limitations on the number or type of partners, their economic interests in the business venture, or the nature of the venture. In addition, all members of an LLC are afforded limited liability protection identical to that of corporate shareholders. Thus, the LLC offers investors the advantages of partnership tax treatment without the risks of personal liability inherent in a conventional partnership and without the restrictions applicable to S corporations.

Professional LLCs

The Minnesota Limited Liability Company Act provides that an LLC may be organized to render professional services, including medicine and surgery. Such professional LLCs will enjoy the benefits of Minnesota's professional corporation statute. Under this statute, no professional can be personally liable to a patient in tort for any act in which the professional did not personally participate. Thus, an existing medical or surgical partnership can provide additional protection from malpractice liabilities to its partners by converting to a professional LLC. The conversion of an existing partnership to

a professional LLC should have no tax consequences for the organization or its partners.

Will LLC's Be Widely Used?

Over time, the LLC is likely to become a commonly used business organization for private and closely held businesses. However, in the near term, certain problems will have to be addressed before LLCs are widely adopted. First, it is unclear whether states that have not enacted LLC statutes will respect the limited liability created by another state's LLC legislation. Until this question is resolved, LLCs will not be used for businesses whose products or services might give rise to liability in a state that does not recognize LLCs.

Second, to satisfy certain tax requirements, LLC statutes typically provide that an LLC must dissolve and terminate its business upon the occurrence of certain events unless the members of the LLC unanimously agree that it should continue in existence. Such statutes also provide that interests in the LLC are not transferable without the unanimous consent of the members. It seems clear that an organizational structure that requires its members to vote unanimously on certain matters from time to time throughout its life in order to continue existing or to admit new members would only be suitable for closely held business ventures in which there are relatively few investors with common goals. Thus, the LLC may be a suitable replacement for small limited partnerships or closely held corporations, but it will not replace the corporation or limited partnership for organizing large, widely held business enterprises.

Operation of an LLC

Under Minnesota's LLC legislation, an LLC can be organized along the lines of a traditional corporation with control delegated to a board of governors who operate like a corporate board of directors and appoint officers to manage the LLC's day-to-day affairs. Alternatively, the LLC can be organized along the lines of a partnership with one or more of the members being appointed as the general or managing partners with responsi-

bility for the entity's business.

Under either model, however, two somewhat unusual features are required before the LLC can qualify as a partnership for tax purposes. In order to achieve partnership tax status, the LLC can have no more than two of the four corporate characteristics set out in certain Treasury regulations, namely: 1) continuity of life, 2) centralization of management, 3) limited liability, and 4) free transferability of interests. By law, the LLC provides limited liability to in-

“An LLC is treated like a partnership for tax purposes but affords owners limited liability.”

vestors. Additionally, it is assumed that most LLCs will operate with centralized management. Therefore, by process of elimination, in order to be a partnership for tax purposes, an LLC must lack continuity of life and free transferability of interests.

The Minnesota LLC statute has been drafted to ensure that any entity organized under the statute will lack continuity of life. By statute, an LLC will dissolve, like a general partnership, upon the death, retirement, resignation, expulsion, bankruptcy, or dissolution of a member, or upon certain assignments of a member's interest. Also by statute, an LLC cannot be created for a term longer than 30 years. Dissolution can be avoided and the business is not required to be terminated if all of the remaining members consent to continue the LLC within 90 days of a death, retirement, or other event that results in dissolution.

The statute permits members to agree in advance to avoid dissolution in the event a member ceases to be a member, but, for tax reasons, the statute provides that this advance consent is not specifically enforceable. A member who breaches such

an agreement can be sued for damages.

To reinforce such agreements against dissolution, the members can also enter into a business continuation agreement under which they agree that when and if the LLC does dissolve, it will be terminated by having its assets transferred to a specified successor entity, which will carry on the business of the dissolved LLC. This means that a disgruntled member cannot force liquidation and sale of the business if the LLC has an agreement to avoid dissolution and a business continuation agreement.

To avoid the corporate characteristic of free transferability of interests, the LLC statute provides that no member is able, without the consent of all other members, to transfer all the attributes of his or her other interests. The statute permits a member to transfer only the right to receive distributions (financial rights) without the consent of other members. Without consent, a transferee has no right to participate in the management of the LLC (governance rights). Such limitations have been a standard feature of limited partnership agreements for many years and should not prove to be an obstacle in most situations.

Conversion of Existing Corporations to LLCs

Because of the tax advantages of operating as a partnership, many businesses and professional practices are exploring the possibility of converting a corporation to an LLC. In many cases, it may be difficult to convert existing corporations to LLC status without unfavorable consequences because such a conversion would be treated as a taxable liquidation of the corporation.

A taxable liquidation of a regular corporation involves a double tax. The first tax occurs at the corporate level. Upon distribution of its assets in liquidation, the corporation recognizes gain equal to the excess of the fair market value of its assets over their cost. The second tax is at the shareholder level. The shareholders recognize gain equal to the fair market value of the assets distributed to

them in excess of the cost of their shares. Some S corporations can be liquidated without incurring tax at the corporate level, but the tax at the shareholder level cannot be avoided if the distribution results in a gain to the shareholders.

Status Quo Pending Ruling

It should be noted that LLCs probably will not be organized under the Minnesota Act until a ruling is obtained from the IRS that LLCs will be recognized as partnerships for federal tax purposes. This ruling is expected in the near future, but because the Minnesota statute is novel in many respects, businesses and professional practices should defer use of the LLC form of organization until a ruling is issued. MM

John K. Steffen is a partner in the Minneapolis-based law firm of Faegre & Benson. He is the head of that firm's Tax Group and was a member of the committee of the Minnesota State Bar Association that drafted the Minnesota LLC Act.



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K. James Ehlen, M.D.
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THE TIME IS NOW

The title for my remarks is also the theme of a conference held last month by three local business groups formed to influence the reform and redesign of our state's health care system.

"The time is now" expresses purchasers' deep frustration with the delivery and cost of health care as well as their realization that purchasing power gives them a lever for negotiating change.

As they press for changes, employers will quickly find themselves dealing with issues of quality and effectiveness, which have involved payors, like Medica, and providers, like you, for many years.

Cooperative efforts will be needed to define effectiveness in health care delivery systems. Medica believes the only worthwhile target is value, which is defined by the relationship between quality of care and the cost of that care.

Inevitably, discussions will include defining and enforcing quality measures that affect providers and payors, alike.

At Medica, we are responding with innovative programs driven by a philosophy of continuous quality improvement. This work is carried on Medica's Quality Assurance staff and the Plan's Medical Policy Council and its committees representing medical and surgical specialties.

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MEDICA

How to Evaluate Investment Managers

Larry D. Nielsen

The number of doctors employing equity investment managers has grown dramatically in the last few years. Faced with the complexities of investment alternatives, more physicians—individually and as trustees—rely on investment managers to bolster the security of their lifestyles and assure the rewards of retirement.

Many doctors want a specialist directing the capital in their personal and retirement portfolios. They'd rather be free to practice medicine without facing all the investment decisions, and they like the performance that better managers can produce.

Like any investor, a physician occasionally may want to add a specialized manager, replace an under-performing manager, or avoid excessive exposure to a potentially detrimental event (diversification is particularly important if you're a trustee). Blending different investment styles through the use of multiple managers can maintain returns while increasing consistency.

How can you tell a competent investment manager from an artful masquerader? This article, which describes nine factors to consider when evaluating a manager, will help you do that. First, collect data on at least five managers, compare the information obtained, then make a selection. You can either complete the evaluation yourself or find a specialized financial consultant to help. In either case, this evaluation can help you retain managers who serve you favorably for a long time. The nine factors to consider fall into two categories: subjective factors and objective factors.

Subjective Factors

Properly evaluate investment management firms primarily on subjective

factors. The performance numbers do *not* tell the whole story. If a firm cannot reproduce past results through a consistently applied decision-making process, the perfor-

“Chief to a firm’s achievements is its ability to adhere to a stated investment process.”

mance numbers you get from an investment manager are not meaningful.

1. Who are the people on the investment management team? There is a common misconception that choosing an investment firm simply requires a numbers analysis. Not true—investment management is a “people” business. Individuals, not firms, make investment decisions. The accomplishments of an investment firm depend on its people.

A strong team distinguishes the more successful investment management firms from the others. People conduct the in-depth analyses of corporate financial statements and interpret the trends; the portfolio manager interprets the financial markets and deciphers the factors that influence them, such as changes in inflation and interest rates and economic and political developments.

Get to know the people who built the track record. Find out about their investment experience and their educational backgrounds. In this business, the skillful often leave large organizations to set up their own firms. Changes in personnel can be a

warning that a firm’s performance results can’t be repeated.

Learn about the experience of the professional staff working together as a team and the average age and tenure of each member of the firm. Diversity in age, background, and experience, as well as advanced degrees and financial designations, is desirable. These characteristics create a team that can recognize and respond early to various economic trends.

2. Can the manager articulate a succinct, cohesive investment process? Chief to a firm’s achievements is its ability to adhere to a stated investment process. It is the foundation of the firm’s past and future decisions. The process is indicative of how the manager takes action.

Investment management organizations differ in investment style, capability, and philosophy. A successful investment process is based upon a cohesive and consistent relationship among these areas. The investment process includes a stated discipline regarding security selection, asset allocation, and other aspects of active portfolio management.

Do *not* rely on marketing literature. Formulate your own assessment of the investment process during an on-site visit. Ask for a broad statement of investment philosophy and how the manager views the financial markets, including the motivations and assumptions underlying the manager’s approach. Then, ask why. Note whether the investment process is consistent with the investment philosophy.

Ask about the investment objective for up-market and for down-market cycles. Determine whether there is a clear and concise sell-discipline (a process that determines the price at which to sell a security).

Investment Style

Most portfolio managers adhere to one of a number of investment styles. Each style is designed to produce attractive returns commensurate with a specific level of risk. Here are three of the more prevalent styles among domestic investment managers:

- **Growth** managers invest in the stocks of companies with earnings that are growing faster than the market average and are expected to continue to grow rapidly in the future. Growth stocks have the potential for exceptional returns, yet generally require a high tolerance for considerable changes in price.

- **Value** managers look for companies with current stock prices that are inexpensive when compared with their true long-term values. These stocks tend to pay relatively high dividends and are considered a moderate risk.

- **Balanced** managers allocate assets among a variety of markets, including stocks, bonds, and cash equivalents (such as money-market funds and treasuries). Diversification both across markets and among individual issues helps make this style appropriate for investors with relatively low risk tolerance.

Ask whether the firm has made any mistakes. If so, ask why.

Research is another facet of money management that distinguishes one firm from the next. Whether a firm utilizes proprietary research methods or street research, learn how the firm analyzes the information. Is the process systematic and efficient?

Risk control in the portfolio is just as important as a manager's ability to generate investment return. Evaluate how the manager controls risk, including the diversification policies. These policies include industry diversification, the number of stocks in the portfolio, and the use of cash to control risk. Review the firm's asset allocation philosophy. Does that allocation process dampen volatility as evidenced by past allocation history and performance? How frequently does the allocation change and why?

3. How is the investment process applied? Once you understand the firm's process, determine whether it is likely to be applied consistently in the future. The manager's fundamental strength is based upon consistent application of the decision-making process. You want the past results to be performed again when this manager is investing your capital.

Ask how the lines of authority have been established. How is authority exercised? Are decisions made through an organization or by indi-

vidual portfolio managers? Have specific decision rules been established, or are most decisions judgmental?

Ask the manager to describe the process used to select and sell securities. Consider the probability that each process can be completed time after time, every day, every year.

Also observe how the firm deals with the flow of investment information necessary to make investment decisions. Are these decisions and ideas developed internally, or are they just reorganized public knowledge?

4. How good are client communications and account services? The strength of your relationship depends on regular, effective communication. A communications system must be in place to respond to you quickly and efficiently. Will the firm work to build and maintain a strong relationship with you?

Review the firm's client services. How are problems addressed? Is there a dedicated service team, or is customer service the portfolio manager's responsibility? Is the communications process consistent with the investment decision process? How does the manager communicate in adverse market environments? Evaluating client services also requires reviewing client references.

Portfolio statements must provide you with accurate reporting. Review the portfolio statements to ensure that data are included that

help you monitor and evaluate the manager. Such data should include a detailed listing of assets, the cost for each, market values, performance returns calculated using an approved method, and a comparison with an appropriate index.

5. How good are the facilities, administration, and operational support? The other side of an investment firm is its operational support. For an investment firm to continue successfully, it must manage its workload effectively. Any weakness in operational support can undercut the firm's ability to serve its clients.

Evaluate the facilities during the on-site visit. Does the physical office space support an efficient work flow? Note the adequacy of computer systems and the extent to which the office is automated for accounting, analytical work, and performance measurement.

Ask questions to evaluate administrative support. Is one person responsible for running the firm's daily operations? Are the office files complete and in order, including SEC filings and account information? Is a qualified person responsible for the accounting and treasury functions?

Examine the firm's knowledge of and responsiveness to relevant legal and compliance issues. Ask about the last SEC audit, state registration process, and any conflicts of interest with clients. Review the SEC-required "ADV forms Part I and II."

6. How strong is the business stability of the firm? The business evaluation is a measure of the investment management firm's overall financial health—the firm's ability to manage its business. A firm's ability to control costs and to receive competitive fees is necessary for long-term investment success.

Review the firm's business capability. Does the firm have a business plan? Is investment management the sole source of revenue, or is it one of many operating areas within the firm?

Review the ownership in an independently owned firm. If the firm is not owned by employees, the portfolio managers—the decision makers—must have employee contracts in place.

Continued

Objective Factors

The objective factors are based on historical performance numbers. The ultimate validation of the people, the philosophy, and the decision-making process is the firm's performance, which demonstrates whether the manager has been able to blend the key factors successfully. Keep in mind that performance numbers alone do *not* tell the tale.

Evaluate historical performance results considering these factors:

1. Risk taken to build the track record should be within defined parameters. Knowing the risk a manager assumed to produce the return is essential to understanding the firm's overall performance. The true test of whether an investment approach is successful is not simply the return achieved—the return should not violate defined risk parameters.

A quarter-to-quarter change or variance in return defines portfolio risk. Evaluate risk by having the manager graphically show you the variance in portfolio return from quarter to quarter over the latest three- and five-year periods. Compare these to the variances of an appropriate index, such as the Standard & Poor's 500 Index.

2. Risk-adjusted performance should be favorable relative to an index. Risk-adjusted performance means the variance in portfolio return from quarter to quarter. The risk-adjusted performance is graphed by showing overall portfolio return compared with the quarterly variance of return. This performance does not need to exceed an index in each quarter or for each year. Over a market cycle, however, risk-adjusted performance should compare favorably. Although past performance isn't a promise of future performance, some investment managers have easily outperformed a comparable index over a complete market cycle.

These data are also used to compare the performance with other managers who use the same investment styles. You'll want to compare how each manager performed during the same economic trends, the same up-trend and down-trend markets.

3. Performance must be consistent with the investment philosophy. Inconsistency of risk-adjusted performance, assessed by reviewing long- and short-term performance, signals a breakdown in either the application of the investment philosophy or the decision-making process.

Long-term performance (over five to seven years) is an indicator of a firm's ability to manage money effectively over complete market cycles. The short-term performance record reveals recent trends. A three-year risk-adjusted performance is considered short-term. The one-year number serves as an absolute performance record relative to an appropriate index. These analyses are used to identify any recent changes in the manager's effectiveness and can be an indicator of continuing strength or developing problems.

Next Steps

After collecting and evaluating data from a number of investment managers, set the standards by which you will make your selection. To assure the most satisfactory performance

results over time, choose investment managers whose styles and disciplines are most compatible with your personal investment philosophy, risk tolerance, and financial objectives.

You'll want to monitor the investment managers periodically through quarterly reports. To assure the most satisfactory performance results over time, evaluate an investment organization's adherence to its promised investment discipline, the firmness of its investment philosophies, its financial strength, and its personnel changes.

A Demanding Assignment

Evaluating investment managers requires time and skill. Considering the factors outlined here will assist you as investor or trustee in choosing investment managers who will serve you favorably over a long time. **MM**

Larry D. Nielsen operates an investment management system for physicians and their pension plans and is a vice president/financial consultant with Shearson Lehman Brothers in Minneapolis. © 1992, Larry D. Nielsen.

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The Three A's

A. Stuart Hanson, M.D.

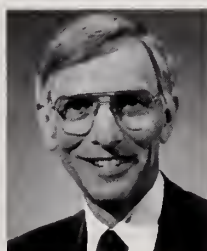
"May you live in interesting times."
—Chinese curse

Reform the health care system, they say. But whom should we follow? Who should lead? What should we change? What should we keep? The academic discussion, the social debate, and business pressures have turned to the political arena. MnCare (formerly the Minnesota Health Right Act) is being implemented in Minnesota and discussed in legislatures across the country. The Congress and the president promise to make health care an early item of business in the next congressional session.

Why are we in this state of affairs? Needing simple concepts for complex problems, I think of the three A's: accessibility, affordability, and accountability.

Accessibility: Basic health care is simply not available to many Americans. Nearly 9 percent of Minnesota's population is not insured. Many Minnesotans are restrained by high deductibles, disease exclusions, and unaffordable insurance when they change or lose their jobs or change their family status. Most of the disenfranchised are actually working, but insurance is either unavailable or unaffordable to them. The employee-based system of procuring health care insurance is working for the majority, but many are falling through the cracks.

The MMA has declared that, "all Minnesotans are entitled to a basic level of health care," and "individuals, employers, and government have an obligation to ensure adequate coverage of all citizens." These were sound principles before MnCare was passed, and they remain sound principles today. As physicians, we must remain dedicated to working with all



"We must maintain
and improve the
high-quality care
now available
to most and make
it available
to all."

interested parties to make health care accessible to all Minnesotans—soon.

Affordability: Health care has become expensive. The capacity to treat injuries and change the course of disease has expanded enormously. The future prospects for manipulative intervention, such as gene therapies, are truly astounding. Yet much of what we expend, possibly over 50 percent, could be saved by healthier behaviors, earlier detection, and earlier intervention. We are a society of individuals bent on destroying ourselves with alcohol, drugs, tobacco, fists and guns, cycles and autos, and unsafe sex. Furthermore, administrative costs eat up nearly one-third of the money available for health care. Liability fears promote overutilization of confirmatory tests. Some technology is being advanced before it is proven effective. Publicly funded programs such as Medicare and Medicaid do not cover their real

costs, leading to cost shifting onto employers and individuals.

All of these problems can be fixed. But as they are addressed, we must maintain and improve the high-quality care now available to most and make it available to all. An adequate broad-based funding source is the only way we will get fair, equitable, affordable, and universal coverage for everyone.

Accountability: Have we done a poor job of selling ourselves? Or have we oversold what the health care system can do? Even we in the system sometimes have difficulty agreeing; how can we expect purchasers and the general public to know whether they are getting good health care if we cannot provide an understandable, standardized accounting of our interventions on their behalf? We are told there is too much variation in care, which increases cost unnecessarily. Guidelines and practice parameters based on the best scientific information are being developed. Systems for measuring and analyzing outcomes are in their infancy. Health status measures are often subjective and imprecise. Scientific accuracy and reliability are hard to come by when measuring health professionals and the systems in which they work. Yet, we must try. We must do our best to account for what we do on behalf of our patients. They deserve no less. We are responsible for a big portion of our country's resources. We must develop measures to communicate our successes and establish methods to make improvements where needed.

Accessibility, affordability, and accountability. If we fix these three problems, we will be successful. I believe it is possible, and I look forward to the future.

MM

People and Places Making Medical News

People

Maternal and Child Health Leadership Award

Charles N. Oberg, M.D., a pediatrician from St. Louis Park, received the 1992 Betty Hubbard Maternal and Child Health Leadership Award at a meeting of the state Maternal and Child Health (MCH) Advisory Task Force in recognition of his continued work to address the health needs of mothers and children in Minnesota.

Oberg is an associate professor in the Division of General Pediatrics and Adolescent Health at the University of Minnesota Medical School. Previously, he was a pediatric staff physician in the Department of Pediatrics at the Hennepin County Medical Center and was medical director of HCMC's Teen-Tot Clinic, which serves the medical and psychosocial needs of adolescent parents and their children. He was also medical director of the Hennepin County Homeless Assistance Project, which offers maternal and child health care to homeless families.

The Hubbard Award is presented annually by the MCH Advisory Task Force and the Minnesota Department of Health in memory of Betty Hubbard, one of the original members of the MCH advisory task force and a lifelong advocate for the health of mothers and children in Minnesota.

Preus Leadership Award

Elizabeth Jerome, M.D., a pediatrician and nationally recognized leader in addressing the health problems of today's teens, received the fifth David W. Preus Leadership

Award, which recognizes outstanding leadership expressed through service to others. Currently an assistant clinical professor in pediatrics at the University of Minnesota Medical School, she served for nearly 20 years as medical director of Teenage Medical Services at the Minneapolis Children's Medical Center. She also has served as a medical volunteer in Thailand and Uganda.

Known for her forthright, realistic approach to dealing with her young patients, Jerome has been a passionate advocate for honesty in wrestling with critical teen health issues, such as venereal diseases, AIDS, and teenage pregnancy.

The Preus Award was established in 1988 to recognize the outstanding contributions to church and community of David W. Preus, who, at the time of his retirement, was presiding bishop of the American Lutheran Church. A broadly representative sponsoring council selects the honorees and directs the endowed fund that supports the award.

Unity Hospital Physician Recognition Award

Richard Lynch, M.D., a pathologist in the laboratory at Health One Unity Hospital, received the Hospital's Physician Recognition Award. Lynch was selected by physician leaders and board members at Unity for exemplary service.

A native of St. Paul, Lynch has been with Unity Hospital's Department of Pathology since 1976 and has chaired and served on numerous committees. He was chief of the medical staff in 1990.

BehavioralCare Medical Director

Richard R. Irons, M.D., is the new medical director of the Professional Assessment Program at Behavioral-

Care Network, a Minneapolis-based partnership between Abbott Northwestern Hospital and selected behavioral health services of Health One. Since 1990, Irons had been medical coordinator for the Professional Assessment Program at the Golden Valley Health Center.

MNA Executive Director

The Minnesota Nurses Association board of directors has selected Les Torgerson as the association's executive director. Torgerson has a master's degree in vocational counseling, a juris doctorate, and is certified as a service professional in human resources by the American Society for Personnel Administration. He is past president of the North Dakota Public Health Association and has held office in a number of regional personnel and legal organizations.

MHA Innovation of the Year

A computer software system that Leighton Siegel, M.D., developed in conjunction with operating room staff at United Hospital, has won the Minnesota Hospital Association's 1992 Innovation of the Year Award for Cost Effectiveness. The only system of its kind in the nation, it uses the same principle that airports use to inform passengers of scheduled arrivals and departures. However, instead of airplanes, the system tracks patients having surgery at United. By glancing at a screen mounted in the preop area, the doctors lounge, or the family waiting room, physicians, operating room staff, and family members can determine whether the patient is in the preop area or the operating room, is recovering in postop, or has returned to the room. The software replaces a system that relied on

overhead pages, frequent phone calls to the family waiting room, and a grease pencil and wipe board to keep staff, physicians, and family members informed of patient progress.

According to Siegel, the system will soon be available to other hospitals through a corporation he developed to distribute the program nationwide.

Minnesota Health Care Commission

Michael Scandrett has been appointed executive director for the Minnesota Health Care Commission. According to Tom Swain, chair of the commission, "Michael Scandrett played an important role in the passage of Minnesota's health care reform legislation as the lead staff person for the legislative negotiating team." A University of Minnesota Law School graduate, Scandrett has served as legal counsel to the Minnesota Senate in the nonpartisan Office of Senate Counsel and Research.

David Lutes, risk manager of the Minneapolis Public Schools, has been appointed chair of the Health Planning Advisory Committee. He occupies one of the two employer positions on the committee.

The Minnesota Health Care Commission has meetings scheduled for November 4 and 17 and December 2 and 15.

Medica Vice President

Lois B. Wattman, who joined Medica last December as director of public policy development, has been named Medica vice president of public policy. Wattman will lead Medica's efforts to set public policy and develop community-based programs and services. Before joining Medica, Wattman was legislative counsel for Blue Cross and Blue Shield of Minnesota for five years. Previously, she was director of the Minnesota Medical

Association's division of health policy and initiatives and a legislative assistant to U.S. Rep. Gerry Sikorski when he was a state senator.

P l a c e s

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University Fires Head of ALG Drug Program

The University of Minnesota fired Richard Condie as director of its ALG drug program after discovering that he pocketed at least \$62,000 from selling a drug byproduct to a Canadian firm. As *Minnesota Medicine* went to press, the university had also begun proceedings to fire him from the medical school, where he is an associate professor of surgery. ALG is an investigational transplant drug that the university manufactures and sells.

An audit showed that Condie had an "unauthorized financial arrangement" to sell hemoglobin to Hemosol, a Canadian company that was conducting research to develop a blood substitute. John Najarian, M.D., head of the university's surgery department, said he knew nothing of these arrangements.

The Minneapolis-based *Star Tribune* reported in August that the U.S. Food and Drug Administration had halted the sales of ALG because of record-keeping problems related to the drug.

The university has named Arthur Matas, M.D., surgery professor and director of the kidney transplant program, to serve as temporary director of the ALG program.

HealthEast Completes St. John's Education Center

Through donations from more than 180 individuals, corporations, and businesses, HealthEast St. John's Hospital completed the P.T. Watson and Jeanne Winsor Watson Center, which will provide medical information programs to the community on such topics as diabetes, heart disease, and cancer.

The center was named in honor of the Watsons, Roseville residents who played a significant role in the facility's development. For Watson, a physician in the Maplewood area, the center is the realization of a life-time ambition to provide health care, including health education, to the community.

The center will also provide preventive medicine information on such topics as diet, exercise, and prenatal care.

S o c i o e c o n o m i c s

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MMIC and Iowa Physicians Mutual Agree to Merge

In a mutual commitment to remain physician controlled, Midwest Medical Insurance Company (MMIC) and Iowa Physicians Mutual Insurance Trust (IPMIT) have agreed to merge. The merger has been approved by boards of both companies, but the agreement is pending final approval by regulatory agencies as well as IPMIT policyholders and Midwest Medical Insurance Holding Company shareholders.

The two companies plan to begin joint operations in early 1993. MMIC will continue to operate with headquarters in Minneapolis and a regional office in Des Moines, Iowa, using many of the current IPMIT employees. Following the merger, MMIC will insure about 5,000 physicians in the states of Iowa, Minnesota, North Dakota, and South Dakota. Combined assets will be nearly \$200 million and policyholder surplus in excess of \$50 million.

Members of both companies are required to belong to state medical societies to become policyholders.

Medica Forms Foundation

Medica announced in September the formation of the Medica Foundation, a non-profit organization that will be dedicated to promoting managed care health

concepts. It kicked-off the new foundation with a forum on national health care reform featuring former U.S. Surgeon General C. Everett Koop, M.D., September 17. Following the forum, David Strand, Medica senior vice president, said Medica envisions the foundation will become involved in 1) sponsoring a forum series to address significant health care policy issues, 2) sponsoring several research studies on managed-care-related topics, and 3) sponsoring educational programs and training for physicians and other health care providers. It also will coordinate and manage Medica's community involvement program.

The foundation has been initially funded with \$2 million from Medica. Former Pillsbury Company executive Thomas R. McBurney has been named chair of the Medica Foundation board of directors. Currently, McBurney is president of McBurney Management Advisors, a management consulting firm he founded in 1990.

The foundation will hold a series of forums starting in January to address federal and state health care issues, such as health care reform, clinical practice parameters, health care costs, and health care systems. For more information about Medica Forum '93, call 612/936-6849.

Mayo, Luther, and Midelfort Finalize Merger

Luther Hospital and Midelfort Clinic's merger with Mayo Clinic went into effect September 30. "We're excited to finalize the agreement," said Douglas Trembath, president and chief executive officer of Luther Hospital. "It allows us to respond to the needs of our patients. We can maintain our current level of health care services and bring additional doctors and health care professionals to Eau Claire to meet the needs of patients in Chippewa Valley."

Under the agreement, Luther Hospital and Midelfort Clinic

employees will remain employees of their respective organizations.

Public's Medical Waste Fears Exaggerated

Widespread public fears about medical waste are "not supported by scientific evidence," according to a task force report prepared for the Minnesota Legislature. The report recommends no major changes in Minnesota's current system for managing infectious waste, although it does include a series of recommendations for improving that system.

The 1991 Legislature set up the 19-member Medical Waste Task Force to look at the volume of medical waste being produced in the state and the capacity of current facilities and systems for decontaminating infectious waste, as well as the alternatives to incineration and burial in landfills as the state's primary strategies for treating and disposing of infectious waste.

After completing the study, the group declined to endorse any particular method or technology for treating or disposing of infectious waste. "What we discovered was that all of the available technologies have both benefits and drawbacks," said task force chair Beverly Krogseng, who is assistant commissioner of health at the Minnesota Department of Health. "There is no environmentally neutral method for dealing with infectious waste."

The danger to the public from infectious waste is minimal, according to the report. Studies have found that medical waste is no more likely to contain potential disease-causing organisms than ordinary solid waste. There are also no known cases where a member of the general public has contracted a disease through contact with infectious waste.

However, the report does conclude that infectious waste poses a "real threat to health care workers and waste handlers," especially if they come in contact with improperly handled or

discarded sharps. The report stresses the importance of handling and disposing of sharps properly in health care facilities.

State Urges Early Vaccinations

The Minnesota Department of health launched a campaign in September urging parents to vaccinate their children earlier than state law requires. Children must be immunized before starting school or day care, but health experts recommend immunization during infancy so children will be protected during early childhood, when some vaccine-preventable illnesses hit hardest. Three preschoolers died of measles in the Twin Cities in 1990.

FDA to Collect Fees from Drug Companies

The U.S. Senate approved in October a plan to require pharmaceutical companies to pay fees to help cover the cost of reviewing the safety of new drugs and to speed the process. The House had already approved the bill, and, as *Minnesota Medicine* went to press, President Bush was committed to signing it. The new law is expected to enable the Food and Drug Administration to make available more quickly new drugs that fight AIDS, cancer, Alzheimer's, Parkinson's disease, and other illnesses.

The FDA, which expects to collect about \$300 million over the next five years through the new law, plans to hire 600 new examiners to speed drug approval. Its goal is to cut the review times in half—to six months for the most important drugs and to 12 months for others.

Service Corps Docs Don't Stay Put

Almost nine of 10 doctors who work in rural areas in exchange for medical school scholarships leave their practices after their obligations end, according to a study published in the September 23

Journal of the American Medical Association. Four of 10 doctors who practice in rural areas by choice remain in those areas.

The study suggests that the National Health Service Corps is failing its main goal of increasing the number of doctors in areas needing them. Some doctors surveyed said they planned to stay longer but left because of how the program was managed.

An official at the federal agency that oversees the corps said improvements have been made to the program. Applicants are now interviewed face-to-face instead of by mail, they are better prepared for their jobs, and 44 states now assist in recruiting and retaining the physicians.

Rates, Trends, Data

Drug, Alcohol Use Down Among Minnesota Students

Minnesota students are using drugs and alcohol less than in 1989, but many still face problems with family violence or sexual or physical abuse, according to a survey last spring of 131,000 sixth-, ninth-, and 12th-graders given by the Minnesota Department of Education.

The survey shows that use of alcohol, marijuana, cocaine, and other drugs has declined substantially since 1989. Forty-one percent of seniors said they use alcohol at least once a month, compared with 54 percent in 1989. Tobacco use remains the same, with nearly 25 percent of high school seniors smoking daily.

The survey also found that rates of sexual activity are virtually unchanged, but condom use has increased, and sexually active students are likelier to discuss AIDS with their partners than in 1989.

The rate of attempted suicide was down slightly or remained the same among all groups except 12th-grade girls. The survey shows a strong correlation between sexual abuse and suicide attempts for boys and girls and indicates that girls are

far likelier to attempt suicide. Eight percent of 12th-grade boys said they had attempted suicide, the same as in 1989, but the number of senior girls attempting suicide rose from 16 percent to 18 percent. "We have an attempted-suicide rate among young women that's astonishingly and shockingly high," said State Education Commissioner Gene Mammenga.

By age 15, one in six girls and one in 25 boys said they had been sexually abused. One in eight students said they had been physically abused by an adult in their household, and one in seven said they had seen another family member being physically abused. One in five reported a family alcohol or drug problem. Overall, more than one-third of Minnesota's adolescents have dealt with the effects of sexual or physical abuse, family violence, or alcohol and drug problems, concluded state officials.

U.S. Children's Health Declining

American Children are less physically fit, more prone to disease, and increasingly likely to die from murder or AIDS than in the mid-1980s, report health experts from the American Health Foundation, who gave a C-minus rating to the state of U.S. children's health. The group's report, based largely on statistics from the Centers for Disease Control, said measles fell from 13,500 cases in 1980 to 2,822 cases in 1985, but jumped to 9,411 cases last year. Mumps and rubella showed similar patterns. Infant mortality has increased since the mid-1980s. AIDS cases in children under age 13 jumped almost six times from 133 in 1985 to 782 in 1990.

In addition, studies show that half of girls and 25 percent of boys cannot do one pull-up, and 40 percent of children aged 5 to 8 have at least one coronary disease risk factor.

However, drug and alcohol use appear to be declining nationally.

The percent of high school students who used cocaine in the past 12 months dropped from 13 percent in 1985 to 3.5 percent last year, and marijuana use fell from 41 percent to 24 percent. Smoking and dental problems have also declined.

Innovations

Mayo Uses Aggressive Treatment for Prostate Cancer

Surgical removal of the prostate together with surgical or chemical castration to end production of testosterone can increase long-term survival for some men whose prostate cancer has spread to the lymph nodes, according to Mayo Clinic researchers. Men with normal DNA content in their tumor cells—about 40 percent of all patients—do extremely well with this treatment, said Horst Zincke, M.D., the urologist who headed the study.

According to Zincke, studies at Mayo show that 95 percent of patients whose prostate cancer has spread to up to a half-dozen pelvic lymph nodes survive at least 10 years if their cancer cells have normal DNA content; 40 percent of men whose prostate glands are not removed and who don't undergo castration survive that long.

For those patients with abnormally high DNA content in their cancer cells, the treatment means at least five years free from advancing cancer for 70 percent of patients, compared with 25 percent of similar patients who don't get the aggressive treatment.

The study included 370 patients whose cancer had spread to the lymph nodes.

Medical Research

Kidney Donation Doesn't Increase Health Risks

People who donate a kidney do not have an elevated risk of suffering from kidney failure or hypertension, according to a study of Minnesota patients published in

the October 3 issue of the *Lancet*. Twenty years after donating a kidney, the donors' health was the same as would be expected of people their age, said Arthur Matas, M.D., the investigator and a professor of surgery at the University of Minnesota. "This is encouraging news. You worry about the ethics of asking people to donate if you don't know the long-term risks," he said. He added that patients live longer with kidneys from living donors than with kidneys from cadavers.

The study included 78 people who donated kidneys at the University of Minnesota between January 1963 and December 1970. Fifteen donors had died, but none had died of kidney disease. Researchers compared 57 donors and 65 siblings, looking for signs of kidney disease, such as high blood pressure. The donors and siblings had similar blood pressure—134/80 for donors and 130/80 for siblings. Thirty-two percent of

donors were taking drugs for hypertension, compared with 44 percent of siblings. Creatinine clearance was also similar.

The researchers also surveyed 251 U.S. and Canadian transplant

surgeons in 158 hospitals about the rate of death following surgery to remove a kidney. The surgeons reported 17 deaths, a mortality rate of 0.03, which Matas called "very low."

MM

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Physician Placement Service for the U.S. Army Medical Department, both Active Duty and Reserve. Information will be available about financial assistance as well as the large number of challenging positions in both the Active Army and the U.S. Army Reserve.

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A Calendar of Continuing Medical Education Courses

Provided through the MMA Medical Education Subcommittee on CME Resources. For assistance with scheduling meetings or for information on future medical meetings and CME courses, please contact the MMA office: 2221 University Avenue SE, Suite 400, Minneapolis, Minnesota 55414; 612/378-1875. Information for each entry is arranged by date; name of program; primary sponsor; location; contact person.

NOVEMBER 1992

Nov. 6 **Thrombolytic Therapy in Acute MI** Abbott Northwestern Hospital; Minneapolis Heart Institute, Minneapolis, MN. CONTACT: Minneapolis Heart Institute Foundation, 920 East 28th Street, Minneapolis, MN 55407; 612/863-3979.

Nov. 6 **17th E. T. Bell Fall Pathology Symposium** Office of Continuing Medical Education, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Nov. 6 **Prostate Seed Implantation: A Practical Course** Abbott Northwestern Hospital and Teknar; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

Nov. 6-7 **Front Line Neurology: Primary Care Management of Patients with Neurologic Problems** Abbott Northwestern Hospital and Minneapolis Neuroscience Institute; Marriott City Center, Minneapolis, MN. CONTACT: Cathy Kohn, CME Office 14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

Nov. 7 **Fourth Annual Oncology Conference** Health One Corporation; Radisson Ridgedale, Minneapolis, MN. CONTACT: Sue Hance, Health One Medical Education, 2810 57th Avenue North, Minneapolis, MN 55430; 612/574-7895 or 800/343-DOCS.

Nov. 7 **Geriatric Seminar** Group Health Foundation; Minneapolis Metrodome Hilton, Minneapolis, MN. CONTACT: Debbie Bladine, 2829 University Avenue SE, Minneapolis, MN 55414; 612/623-8479.

Nov. 7-8 **Update in Cardiovascular Disease** Mayo Clinic/Mayo Foundation; Mayo Foundation, Rochester, MN. CONTACT: Rita Kunz or Jan Fleck, Postgraduate Courses, Section of CME, Siebens 5, Mayo Foundation, 200 1st Street SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

Nov. 9-13 **Team Management of Diabetes Mellitus** International Diabetes Center; International Diabetes Center, Minneapolis, MN. CONTACT: Cindy Poppitz, International

Diabetes Center, 5000 West 39th Street, Minneapolis, MN 55416; 612/927-3393.

Nov. 12-13 **Gynecologic Clinical Reviews 1992** Mayo Clinic/Mayo Foundation; Leighton Auditorium, Mayo Foundation, Rochester, MN. CONTACT: Rita Kunz or Jan Fleck, Postgraduate Courses, Section of CME, Siebens 5, Mayo Foundation, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

Nov. 12-13 **Pediatric Advanced Life Support** Minneapolis Children's Medical Center; Minneapolis Children's Medical Center, Minneapolis, MN. CONTACT: Kathy Ingerson, 2525 Chicago Avenue South, Minneapolis, MN 55404; 612/863-5884.

Nov. 12-14 **Strategies in Primary Care Medicine** St. Paul-Ramsey Medical Center; Holiday Inn East, St. Paul, MN. CONTACT: Office of CME, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

Nov. 13 **Minnesota Urological Society Pyelogram Conference** Minnesota Urological Society; Hotel Sofitel, Bloomington, MN. Contact: Jennifer Syltie, 2221 University Avenue SE, Suite 400, Minneapolis, MN 55414; 612/378-1875 or 800/999-1875.

Nov. 13-14 **Lasers in Orthopedic Surgery** Laser Center of Abbott Northwestern Hospital; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Laser Center 39102, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

Nov. 13-14 **Update on Inflammatory Bowel Disease** Mayo Clinic/Mayo Foundation; Mayo Foundation, Rochester, MN. CONTACT: Rita Kunz or Jan Fleck, Postgraduate Courses, Section of CME, Siebens 5, Mayo Foundation, 200 1st Street SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

Nov. 14 **Topics in Pediatric Emergency Medicine** Minneapolis Children's Medical Center; Minneapolis Children's Medical Center, Minneapolis, MN. CONTACT: Kathy Ingerson, Minneapolis Children's Medical Center, 2525 Chicago Avenue South, Minneapolis, MN 55404; 612/863-5884.

Nov. 14-15 **Monitoring Neural Function During Surgery** Mayo Foundation; Mayo Foundation, Rochester, MN. CONTACT: Rita Kunz or Jan Fleck, Postgraduate Courses, Section of CME, Siebens 5, Mayo Foundation, 200 1st Street SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

Nov. 19-21 **Diabetes Nutrition Symposium: "Nutrition and Diabetes—From Theory to Practice"** International Diabetes Center; International Diabetes Center, Minneapolis, MN. CONTACT: Cindy Poppitz, International Diabetes Center, 5000 West 39th Street, Minneapolis, MN 55416; 612/927-3393.

Nov. 20 **Primary Care Update/Sports Medicine** Hennepin County Medical Center; Hennepin County Medical Center, Pillsbury Auditorium, Minneapolis, MN. CONTACT: Ann Samways, 701 Park Avenue, Mailcode 867A, Minneapolis, MN 55415-1829; 612/347-2075.

Nov. 20 **Ramsey Research Conference** St. Paul-Ramsey Medical Center; St. Paul-Ramsey Medical Center, St. Paul, MN. CONTACT: Office of CME, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

Nov. 20-21 **Primary Care Update VI** Methodist Hospital Medical; Radisson Hotel and Conference Center, Plymouth, MN. CONTACT: Jan Stalpes, Methodist Hospital, Medical Staff Office, PO Box 650, Minneapolis, MN 55440; 612/932-5135.

Nov. 21 **Case Studies in Otorhinolaryngology: Head & Neck Surgery** Mayo Clinic/Mayo Foundation; Mayo Foundation, Rochester, MN. CONTACT: Rita Kunz or Jan Fleck, Postgraduate Courses, Section of CME, Siebens 5, Mayo Foundation, 200 1st Street SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

Nov. 30-Dec. 4 **Team Management of Diabetes Mellitus** International Diabetes Center; International Diabetes Center, Minneapolis, MN. CONTACT: Cindy Poppitz, International Diabetes Center, 5000 West 39th Street, Minneapolis, MN 55416; 612/927-3393.

DECEMBER 1992

Dec. 3-5 **Annual Cardiopulmonary Medicine Update** St. Paul-Ramsey Medical Center; Holiday Inn East, St. Paul, MN. CONTACT: Office of CME, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

Dec. 3-5 **Managing Mortality: Ethics, Euthanasia, and the Termination of Medical Treatment** The Center for Biomedical Ethics, University of Minnesota, with the support of the FHP Foundation; University of Minnesota, Minneapolis, MN. CONTACT: Managing Mortality Conference, Center for Biomedical Ethics, 420 Delaware Street SE, Box 33 UMHC, Minneapolis, MN 55455; 612/688-6570.

Dec. 4-5 **Children with Brain Injuries: Can We Make a Difference?** Gillette Children's Hospital, HCMC, and Minnesota Head Injury Association; Sheraton Midway Hotel, St. Paul, MN. CONTACT: Office of Academic Affairs, Hennepin County Medical Center, 701 Park Avenue, Suite 4512, Minneapolis, MN 55415; 612/347-3533.

Dec. 5 **Minnesota Obstetrical and Gynecological Society Fall Scientific Meeting** Minnesota Obstetrical and Gynecological Society; Minneapolis Marriott City Center, Minneapolis, MN. CONTACT: Susan Thompson, 5000 West 39th Street, St. Louis Park, MN 55416; 612/924-1802.

CONTINUING MEDICAL EDUCATION

ST. PAUL-RAMSEY MEDICAL CENTER

Fall-Spring Conference Schedule

Mark your calendar now for these upcoming conferences:

1992

- | | |
|----------------|---|
| November 12-14 | Strategies in Primary Care Medicine, St. Paul |
| November 20 | Ramsey Research Conference, St. Paul |
| December 3-5 | Cardiopulmonary Medicine, St. Paul |
| December 9 | Rheumatology Program, Bloomington |

1993

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|-------------|---|
| February 19 | Burn Care Today, St. Paul |
| March 11-12 | Family Medicine Today, St. Paul |
| March 19 | Occupational Medicine Update, Minneapolis |
| March 25-26 | Critical Care 1993: Practical Approaches & Case Discussions, St. Paul |
| April 1-2 | Ob/Gyn Update, St. Paul |
| April 2 | ENT Update for Primary Care Physicians, St. Paul |
| April 16 | Domestic Violence: Healing the Family |
| April 30 | Domestic Violence: Healing the Family |

Information and Registration:

Continuing Medical Education, St. Paul-Ramsey Medical Center,
640 Jackson Street, St. Paul, MN 55101; Phone 612/221-3992



640 Jackson Street
St. Paul, MN 55101
(612) 221-3992

RAMSEY

JANUARY 1993

Jan. 9 **Pediatric Seminar (Pain)** Group Health Foundation; Minneapolis Metrodome Hilton (tentative), Minneapolis, MN. CONTACT: Debbie Bladine, 2829 University Avenue SE, Minneapolis, MN 55414; 612/623-8479.

Jan. 15 **Minnesota Urological Society Pyelogram Conference** Minnesota Urological Society; Hotel Sofitel, Bloomington, MN. CONTACT: Jennifer Syltie, 2221 University Avenue SE, Suite 400, Minneapolis, MN 55414; 612/378-1875 or 800/999-1875.

Jan. 21-22 **Pulmonary Function Testing Workshop** St. Paul-Ramsey Medical Center; St. Paul-Ramsey Medical Center, St. Paul, MN. CONTACT: Office of CME, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

Jan. 22-23 **Advanced Laparoscopic Abdominal Surgery** Abbott Northwestern Hospital, Laser Education Center; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME-14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

FEBRUARY 1993

Feb. 5-6 **Advanced Gastrointestinal Tract Surgery** Abbott Northwestern Hospital, Laser Education Center; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME-14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

Feb. 12 **Genetics for Practicing Physicians** Office of Continuing Medical Education, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Feb. 12 **Minnesota Urological Society Pyelogram Conference** Minnesota Urological Society; Hotel Sofitel, Bloomington, MN. CONTACT: Jennifer Syltie, 2221 University Avenue SE, Suite 400, Minneapolis, MN 55414; 612/378-1875 or 800/999-1875.

Feb. 13 **Adult Medicine** Group Health Foundation; Minneapolis Metrodome Hilton (tentative), Minneapolis, MN. CONTACT: Debbie Bladine, 2829 University Avenue SE, Minneapolis, MN 55414; 612/623-8479.

Feb. 17-20 **Thoracic Organ Transplantation** Abbott Northwestern Hospital; Loews Ventana Canyon Resort, Tucson, AZ. CONTACT: Minneapolis Health Institute Foundation, 920 East 28th Street, Minneapolis, MN 55407; 612/863-3079.

Feb. 19 **Burn Care Today** St. Paul-Ramsey Medical Center; Holiday Inn East, St. Paul, MN. CONTACT: Office of CME, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

Feb. 19-20 **Advanced Laparoscopic Abdominal Surgery** Abbott Northwestern Hospital, Laser Education Center;

Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME-14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

Feb. 26-28 **Neurology in Clinical Practice** Mayo Clinic/ Mayo Foundation; Mayo Foundation, Rochester, MN. CONTACT: Rita Kunz or Jan Fleck, Postgraduate Courses, Section of CME, Siebens 5, Mayo Foundation, 200 1st Street SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

MARCH 1993

March 11-12 **Family Medicine Today** St. Paul-Ramsey Medical Center; Holiday Inn East, St. Paul, MN. CONTACT: Bonnie Young, Office of CME, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

March 12 **Minnesota Urological Society Pyelogram Conference** Minnesota Urological Society; Hotel Sofitel, Bloomington, MN. CONTACT: Jennifer Syltie, 2221 University Avenue SE, Suite 400, Minneapolis, MN 55414; 612/378-1875 or 800/999-1875.

March 12-13 **Advanced Gastrointestinal Tract Surgery** Abbott Northwestern Hospital, Laser Education Center; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME-14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

March 19 **14th Annual Occupational Medicine Update** St. Paul-Ramsey Medical Center; Holiday Inn East, St. Paul, MN. CONTACT: Office of CME, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

March 19-20 **Advanced Laparoscopic Abdominal Surgery** Abbott Northwestern Hospital, Laser Education Center; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME-14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

March 25-26 **Critical Care 1993: Practical Approaches & Case Discussions** St. Paul-Ramsey Medical Center; Holiday Inn East, St. Paul, MN. CONTACT: Office of CME, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

Mar. 27 **Ob/Gyn Seminar** Group Health Foundation; Minneapolis Metrodome Hilton (tentative), Minneapolis, MN. CONTACT: Debbie Bladine, 2829 University Avenue SE, Minneapolis, MN 55414; 612/623-8479.

APRIL 1993

April 1-2 **Annual Obstetrics & Gynecology Update** St. Paul-Ramsey Medical Center; Holiday Inn East, St. Paul, MN. CONTACT: Office of CME, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

April 1-3 **Rheumatology: Diagnostic and Therapeutic Trends** Mayo Foundation; Amelia Island Plantation, Amelia Island, FL. CONTACT: Rita Kunz or Jan Fleck, Postgraduate

Courses, Section of CME, Siebens 5, Mayo Foundation, 200 1st Street SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

April 2 **ENT Update** St. Paul-Ramsey Medical Center; St. Joseph's Hospital, St. Paul, MN. CONTACT: Office of CME, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

April 2-3 **Advanced Gastrointestinal Tract Surgery** Abbott Northwestern Hospital, Laser Education Center; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME-14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

April 16 **Domestic Violence: Healing the Family** St. Paul-Ramsey Medical Center; Holiday Inn East, St. Paul, MN. CONTACT: Office of CME, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

April 20-21 **Pulmonary Function Testing Workshop** St. Paul-Ramsey Medical Center; St. Paul-Ramsey Medical Center, St. Paul, MN. CONTACT: Office of CME, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

April 23-24 **16th Annual Update in Clinical Cardiology** Abbott Northwestern Hospital; Hilton Downtown, Minneapolis, MN. CONTACT: Minneapolis Heart Institute Foundation, 920 East 28th Street, Minneapolis, MN 55407; 612/863-3079.

April 24 **Ophthalmology Update** Mayo Clinic/Mayo Foundation; Mayo Foundation, Rochester, MN. CONTACT: Darcie Skoda, Mayo Clinic, Department of Ophthalmology, 200 1st Street SW, Rochester, MN 55905; 507/284-1709.

April 30-May 1 **Advanced Laparoscopic Abdominal Surgery** Abbott Northwestern Hospital, Laser Education Center; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME-14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

M A Y 1 9 9 3

May 7-8 **Annual Meeting of the Midwest Pain Society** Abbott Northwestern Hospital, Sister Kenny Institute; Hyatt Regency, Minneapolis, MN. CONTACT: Dale Moss, Chronic Pain Rehabilitation Program, Sister Kenny Institute, 800 East 28th Street, Minneapolis, MN 55407; 612/863-4361.

May 14-15 **Cutaneous Laser Surgery** Abbott Northwestern Hospital, Laser Education Center; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME-14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

May 21-22 **Pelviscopic Surgery** Abbott Northwestern Hospital, Laser Education Center; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME-14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

PHYSICIANS

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Healthcare Resource Group works with clients seeking additional physician associates for practices both locally and nationally. Physicians who work with us know that confidentiality is respected and their CVs are not advanced without personal approval. This personal and professional approach has provided valuable assistance to both clients and candidates seeking relocation or an alternative professional affiliation. For further information, please send your CV or call Liz Johnson, Healthcare Resource Group, 9072 Preserve Blvd., Eden Prairie, MN 55347; 612/828-6890. (6/92-R)

Internist to join a progressive 13-physician group practice. Rural college town 30 miles from St. Paul, Minnesota. New clinic and constructing new hospital. Contact: Robert B. Johnson, M.D., River Falls, WI 54022; 715/425-6701. (*9/91-R)

Mankato: FP partner to join four board-certified family physicians, ages 34-43, in fast-growing, full-range practice. ob optional. Population 40,000+. Seventy miles to Twin Cities. Four colleges nearby. Subspecialty consultation readily available on hospital staff. Academic appointment available. Call: Tony Giefer, M.D., 507/387-8231. (8/91-R)

Family Physicians: Well-established south suburban Minneapolis family practice group seeks associates part/full time to staff day clinic. Excellent call schedule, salary, and fringe benefits. Also seeking locum tenens to staff PT/FT Urgent Care Centers and/or day clinic. Contact: Administration, Family Physicians, P.A., 612/435-4125, or send inquiries to Suite 100, 14050 Nicollet Avenue South, Burnsville, MN 55337. (*9/89-R)

Mankato Clinic, Ltd. is seeking BC/BE physicians in the following specialties: invasive cardiology, oncology/hematology, pulmonary medicine, general surgery, gastroenterology, family practice, and general internal medicine. The Mankato Clinic is a 53-physician multispecialty group

practice in south-central Minnesota with a trade-area population of +250,000. Guaranteed salary first year, incentive thereafter with full range of benefits and liberal time off. For more information call: Dr. B. C. McGregor, President, or Roger Greenwald, Executive Vice President, 507/625-1811 or write: 501 Holly Lane, Mankato, MN 56001.

(12/91-R)

BC/BE Internal Medicine and Ob/Gyn Physician: Excellent opportunity to join a well-established, progressive, 26-physician multispecialty group located in an economically sound community of 22,000 (drawing area of 45,000), 65 miles south of the Twin Cities. Full membership after one year. Competitive salary and fringe benefits package. Contact: Craig Oien, M.D., or Terry Tone, Administrator, 134 Southview, Owatonna, MN 55060; 507/451-1120.

(9/92-R)

Forest Lake Doctor's Clinic is seeking a BC/BE family physician and ob/gyn to join a growing 12-physician multispecialty practice. Located 25 miles north of Twin Cities in progressive community with excellent schools, outstanding recreational activities. Hospital located across street from clinic. Respond with CV or call Doug Sill, M.D., Harvey Frank, M.D., or Geoff LaGary, Administrator, 121 SE 11th Avenue, Forest Lake, MN 55025; 612/464-7100. (11/92-R)

MDsearch assists medical groups and hospitals in their recruiting efforts. For confidential information on opportunities in the Upper Midwest, send CV and/or call collect: Mary Jo Cordes, MDsearch, PO Box 21507, St. Paul, MN 55121; 612/454-7291. (12/91-R)

Lake City, Minnesota: Family physician BC/BE needed to join three other FPs in progressive, growing practice on Lake Pepin/Mississippi River in southeastern Minnesota. Excellent first-year salary/benefits in a scenic community with multiple recreational opportunities. Contact: D.D. Pflaum, M.D., 303 South Washington, Lake City, MN; 612/345-3318. (8/90-R)

Olmsted Medical Group is seeking BC/BE physicians in the following specialties: orthopedics, radiology, family practice, emergency medicine, and ob/gyn. Great opportunity for well-trained physicians to join a 55+ physician multispecialty group in a dynamic, progressive practice. In addition to the main office in Rochester, the group operates eight branch offices in southeastern Minnesota. Excellent salary/benefits package includes malpractice insurance, flexible benefits plan, 401(k) and profit sharing, and relocation assistance. Send CV to: Olmsted Medical Group, Attn: Susan Schuett, 210 Ninth Street SE, Rochester, MN 55904. (1/92-R)

Downtown Office Space for Rent: Physician in the Medical Arts Building, 825, wishes to sublet to another physician on a part-time basis for the purpose of sharing overhead expenses. Call: 612/370-0553. (6/90-R)

Wisconsin: 120-physician multispecialty clinic in the Fox River Valley of northeastern Wisconsin desires two BC/BE pediatricians to join department of 15 BC/BE pediatricians. Excellent compensation and benefits package, leading to shareholder status after two years. The community offers a superb recreational, cultural, and family environment in which to practice. For information please call or write: Howard Kidd, M.D., La Salle Clinic, 411 Lincoln Street, Neenah, WI 54956; 414/727-4276. (3/91-R)

Family Physician wanted to join three board-certified M.D.s in well-established, expanding group practice. Weekend ER coverage. No buy-in. Financial package hard to beat. Enjoy a progressive, rural city within easy reach of St. Cloud and Minneapolis. Contact: Dr. Jim Mohs, Melrose Clinic, 603 West Main Street, Melrose, MN 56352; office, 612/256-4228; home, 612/256-3488. (4/91-R)

Ideal Internal Medicine Practice: Excellent opportunity for BC/BE internist to establish a prosperous practice. Progressive 107-bed community hospital with a medical staff of 45 physicians and a service-area population of over 45,000. Vibrant Northern Michigan community with all summer

and winter recreational activities. Salary guarantee of \$110,000 with excellent benefits. Send CV or contact: John Schon, Administrator, Dickinson County Hospitals, 400 Woodward Avenue, Iron Mountain, MI 49801; 800/236-3240. *1-11/92

Internal Medicine, Pediatrics, and Dermatology practice opportunities available at the Faribault Clinic. The Faribault Clinic is a multispecialty group practice of 19 physicians. Faribault is located 50 miles south of Minneapolis on I-35. For more information contact: Ray W. Wood, M.D., or Ken Smith, Administrator, 924 NE First Street, Faribault, MN 55021; 507/334-3921. (4/90-R)

Stillwater: Multispecialty group with emphasis on primary care seeking BC/BE family physician, pediatrician, and internist. Scenic location with excellent school system, supportive medical community with strong local hospital, competitive salary and benefits. Send CV to: Jon Pedersen, St. Croix Valley Clinic, 921 Greeley, Stillwater, MN 55082; 612/439-2215. (12/92-R)

Pediatrician wanted to join group of five board-certified pediatricians in a well-established, progressive group practice. Located in Minneapolis, minutes away from Children's Medical Center. Small practice stressing patient care and preventive medicine. Contact: Gregg Savitt, M.D., 3145 Hennepin Avenue, Minneapolis, MN 55408. (9/91-R)

ONCOLOGIST

The St. Cloud Clinic of Internal Medicine, Ltd., has an opening for a medical oncologist. The St. Cloud Clinic of Internal Medicine is a group of 31 internists, including the subspecialties of cardiology, endocrinology, gastroenterology, nephrology, and pulmonary disease. It has three full-time medical oncologists who are active members of NCCTG/ECOG.

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St. Cloud, a city of 65,000, is a rapidly growing area of Minnesota with a medical-drawing population of 175,000. It is in central Minnesota—65 miles northwest of Minneapolis/St. Paul and adjacent to multiple lakes and recreation areas.

For further information about this opportunity, please contact:

Mark J. Murphy, Administrator, or Scott P. Davis, M.D.
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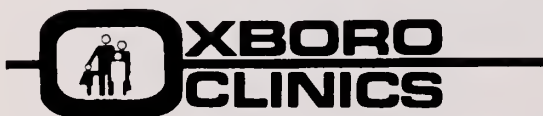
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Family Physician wanted to join five-physician, two-P.A., two-site family practice group in St. Anthony and Shoreview. Ob available. Competitive salary, benefits package, and call schedule. Contact: Gerald Pitzl, M.D., Silver Lake Clinic PA, 612/788-9251. (7/91-R)

Family Practice: Physicians seeking a BC/BE family practice physician for the Norway, Michigan, service area. The physician would have the option of joining one of the existing practices and/or setting up his/her own practice. Anderson Memorial Hospital is a part of Dickinson County Hospitals and has a service-area population of over 45,000. Contact: Dr. Paul Hayes' office, 906/563-9255, or Dr. William Gladstone's home, 906/563-8743. Anderson Memorial Hospital, Main Street, Norway, MI 49870; 906/563-9243. *1-11/92

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General Surgeon: Five-man family practice group seeks surgeon. Only clinic in city of 8,000, one hour from Minneapolis. Position should generate adequate salary and lots of family time. Please contact James W. Dey, M.D., or Ruth Hawker, Clinic Manager, 501 North State Street, Waseca, MN 56093; 507/835-3110. (5/92-R)

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The Morris Medical Center, P.A., is currently seeking a family practitioner to join our multispecialty group. Morris, Minnesota, is a community of 5,500 residents with a four-year liberal arts college. Contact: Mike Flicker,

Administrator, PO Box 600, Morris, MN 56267; 612/589-3232. *6-12/92

Family Practice, Southwest Iowa—BC/BE: Excellent opportunity for two FPs to join multispecialty clinic in Creston, Iowa. Ob optional, limited call, progressive 83-bed hospital, competitive salary and benefits package in a family-oriented community. Send CV to Mike Brentnall, Administrator, Creston Medical Clinic, P.C., 526 New York Avenue, Creston, Iowa 50801; 515/782-2131. 4-11/92

Internist: Regional treatment center interested in full-time BC/BE internist. Forty hours/week. Competitive salary and benefits. Live in the exciting Brainerd Lakes area. Send CV to: Chief of Medicine, Brainerd Regional Human Services Center, 1777 Highway 18 East, Brainerd, MN 56401. *6-1/93

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Eugene, Oregon: 48-physician multispecialty group is seeking BC/BE family physician. Practice includes ob. Excellent schools. Abundant cultural and recreational opportunities. Near Cascade Mountains and coast. Home of University of Oregon. Please send CV to James Schwering, Oregon Medical Group, PO Box 1648, Eugene, OR 97440; or phone 503/686-3850. *3-11/92

Internal Medicine Physician: BC/BE to join 25-physician multispecialty group in Winona, Minnesota, with existing 10-physician Internal Medicine Department. Total draw of 40,000 population. Competitive salary offered. Interested physicians please contact: J. B. Knuesel, Administrator, Winona Clinic, Ltd., 420 East Sarnia, Winona, MN 55987. 3-11/92

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Wisconsin: Growing southern-Wisconsin, 47-physician, multispecialty group is seeking an endocrinologist, general surgeon, internist, neurologist, ob/gyn, ortho surgeon, psychiatrist, and rheumatologist. Guaranteed salary with incentive plus full benefits package. Excellent family environment in college community of 50,000+. Send CV to J.F. Ruethling, Administrator, Beloit Clinic, S.C., 1905 Huebber Parkway, Beloit, WI 53511; or call 608/364-2200. 6-3/93

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Wisconsin—Internist Wanted: Group Health Cooperative, a progressive, growing, primary-care group practice in a city of 60,000—90 miles from Minneapolis/St. Paul—is currently recruiting a third BC/BE internist. Very competitive salary with excellent fringe benefits. Practice high-quality internal medicine in a most desirable location. Please contact: Stuart R. Lancer, M.D., M.B.A., Medical Director, Group Health Cooperative, P.O. Box 3217, Eau Claire, WI 54702-3217; 715/836-8552. *3-12/92

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The Montevideo Clinic is a progressive and growing eight-physician multispecialty group practice in west-central Minnesota. We are recruiting BC/BE family practice physicians. Excellent benefits package includes: compensation based on production with low overhead deduction; comprehensive health, disability, and life insurance; and aggressive target and 401K pension plans. Signing bonus, moving expenses, and minimum salary guarantee. Submit detailed CV to:

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3-1/93

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3-1/93

Family Practice Physician, BC/BE, to join 25-physician multispecialty group in Winona, Minnesota, with existing four-physician Family Practice Department. Total draw of 40,000 population. Competitive salary offered. Interested physicians please contact: J.B. Knuesel, Administrator, Winona Clinic, Ltd., 420 East Sarnia, Winona, MN 55987.

3-1/93

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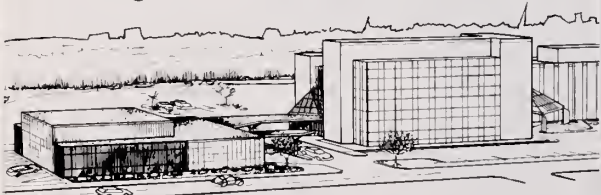
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References: 1. Data on file, Searle. 2. Edmonds D, Würth JP, Baumgart P, et al. Twenty-four-hour monitoring of blood pressure during calcium antagonist therapy. In: Fleckenstein A, Laragh SH, eds. *Hypertension—the Next Decade: Verapamil in Focus*. New York, NY: Churchill Livingstone; 1987:94-100. 3. Midtbo KA. Effects of long-term verapamil therapy on serum lipids and other metabolic parameters. *Am J Cardiol*. 1990;66:131-151. 4. Fagher B, Henningsen N, Hulthén L, et al. Antihypertensive and renal effects of enalapril and slow-release verapamil in essential hypertension. *Eur J Clin Pharmacol*. 1990;39(suppl 1):S41-S43. 5. Schmieder RE, Messerli FH, Garavaglia GE, et al. Cardiovascular effects of verapamil in patients with essential hypertension. *Circulation*. 1987;75:1030-1036. 6. Midtbo K, Lauve O, Hals O. No metabolic side effects of long-term treatment with verapamil in hypertension. *Angiology*. 1988;39:1025-1029.

BRIEF SUMMARY

Contraindications: Severe LV dysfunction (see *Warnings*), hypotension (systolic pressure < 90 mm Hg) or cardiogenic shock, sick sinus syndrome (if no pacemaker is present), 2nd- or 3rd-degree AV block (if no pacemaker is present), atrial flutter/fibrillation with an accessory bypass tract (eg, WPW or LGL syndromes), hypersensitivity to verapamil.

Warnings: Verapamil should be avoided in patients with severe LV dysfunction (eg, ejection fraction < 30%) or moderate to severe symptoms of cardiac failure and in patients with any degree of ventricular dysfunction if they are receiving a beta-blocker. Control milder heart failure with optimum digitalization and/or diuretics before Calan SR is used. Verapamil may occasionally produce hypotension. Elevations of liver enzymes have been reported. Several cases have been demonstrated to be produced by verapamil. Periodic monitoring of liver function in patients on verapamil is prudent. Some patients with paroxysmal and/or chronic atrial flutter/fibrillation and an accessory AV pathway (eg, WPW or LGL syndromes) have developed an increased antegrade conduction across the accessory pathway bypassing the AV node, producing a very rapid ventricular response or ventricular fibrillation after receiving I.V. verapamil (or digitalis). Because of this risk, oral verapamil is contraindicated in such patients. AV block may occur (2nd- and 3rd-degree, 0.8%). Development of marked 1st-degree block or progression to 2nd- or 3rd-degree block requires reduction in dosage or, rarely, discontinuation and institution of appropriate therapy. Sinus bradycardia, 2nd-degree AV block, sinus arrest, pulmonary edema and/or severe hypotension were seen in some critically ill patients with hypertrophic cardiomyopathy who were treated with verapamil.

Precautions: Verapamil should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) or impaired renal function, and patients should be monitored for abnormal prolongation of the PR interval or other signs of overdosage. Verapamil may decrease neuromuscular transmission in patients with Duchenne's muscular dystrophy and may prolong recovery from the neuromuscular blocking agent vecuronium. It may be necessary to decrease verapamil dosage in patients with attenuated neuromuscular transmission. Combined therapy with beta-adrenergic blockers and verapamil may result in additive negative effects on heart rate, atrioventricular conduction and/or cardiac contractility; there have been reports of excessive bradycardia and AV block, including complete heart block. The risks of such combined therapy may outweigh the benefits. The combination should be used only with caution and close monitoring. Decreased metoprolol and propranolol clearance may occur when either drug is administered concomitantly with verapamil. A variable effect has been seen with combined use of atenolol. Chronic verapamil treatment can increase serum digoxin levels by 50% to 75% during the first week of therapy, which can result in digitalis toxicity. In patients with hepatic cirrhosis, verapamil may reduce total body clearance and extrarenal clearance of digoxin. The digoxin dose should be reduced when verapamil is given, and the patient carefully monitored. Verapamil will usually have an additive effect in patients receiving blood-pressure-lowering agents.

Disopyramide should not be given within 48 hours before or 24 hours after verapamil administration. Concomitant use of flecainide and verapamil may have additive effects on myocardial contractility, AV conduction, and repolarization. Combined verapamil and quinidine therapy in patients with hypertrophic cardiomyopathy should be avoided, since significant hypotension may result. Concomitant use of lithium and verapamil may result in an increased sensitivity to lithium (neurotoxicity), with either no change or an increase in serum lithium levels; however, it may also result in a lowering of serum lithium levels. Patients receiving both drugs must be monitored carefully. Verapamil may increase carbamazepine concentrations during combined use. Rifampin may reduce verapamil bioavailability. Phenobarbital may increase verapamil clearance. Verapamil may increase serum levels of cyclosporin. Verapamil may inhibit the clearance and increase the plasma levels of theophylline. Concomitant use of inhalation anesthetics and calcium antagonists needs careful titration to avoid excessive cardiovascular depression. Verapamil may potentiate the activity of neuromuscular blocking agents (curare-like and depolarizing); dosage reduction may be required. There was no evidence of a carcinogenic potential of verapamil administered to rats for 2 years. A study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. Pregnancy Category C. There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor, and delivery only if clearly needed. Verapamil is excreted in breast milk; therefore, nursing should be discontinued during verapamil use.

Adverse Reactions: Constipation (7.3%), dizziness (3.3%), nausea (2.7%), hypotension (2.5%), headache (2.2%), edema (1.9%), CHF, pulmonary edema (1.8%), fatigue (1.7%), dyspnea (1.4%), bradycardia: HR < 50/min (1.4%), AV block: total 1°, 2°, 3° (1.2%), 2° and 3° (0.8%), rash (1.2%), flushing (0.6%), elevated liver enzymes, reversible non-obstructive paralytic ileus. The following reactions, reported in 1.0% or less of patients, occurred under conditions where a causal relationship is uncertain: angina pectoris, atrioventricular dissociation, chest pain, claudication, myocardial infarction, palpitations, purpura (vasculitis), syncope, diarrhea, dry mouth, gastrointestinal distress, gingival hyperplasia, ecchymosis or bruising, cerebrovascular accident, confusion, equilibrium disorders, insomnia, muscle cramps, paresthesia, psychotic symptoms, shakiness, somnolence, arthralgia and rash, exanthema, hair loss, hyperkeratosis, macules, sweating, urticaria, Stevens-Johnson syndrome, erythema multiforme, blurred vision, gynecomastia, galactorrhea/hyperprolactinemia, increased urination, spotty menstruation, impotence.

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COVER

The physician's image is ailing, according to Gallup surveys, which reveal that 69 percent of the public is losing faith in doctors—up from 64 percent three years ago, says our cover story (page 20), which examines just what doctors can do to cure the problem. As MMA President A. Stuart Hanson advises in his letter this month (page 37), a physician's image is built one patient at a time, and actions speak louder than words.

Illustration by Kate Mueller of Minneapolis.

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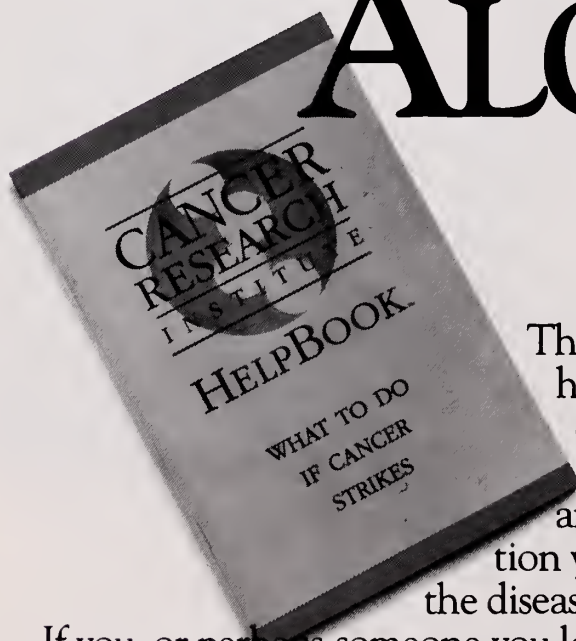
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The Three E's: Ethics, Euthanasia, and Economics

Edmund C. Burke, M.D.

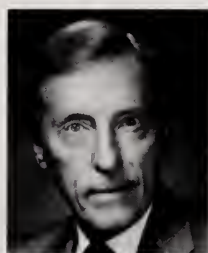
How times have changed. Not so long ago, the only discussions about medical ethics considered whether to save a baby if the pregnancy put the mother's life at risk. Today, the field of biomedical ethics has exploded with the advent of such issues as euthanasia, health care rationing, and genetic testing, to name just a few.

In this issue of *Minnesota Medicine*, we interview Arthur Caplan, Ph.D., director of the Center for Biomedical Ethics at the University of Minnesota (page 7). Dr. Caplan was co-chair of a conference titled "Managing Mortality: Ethics, Euthanasia, and the Termination of Medical Treatment," held December 3-5 in the Twin Cities. In the interview, Dr. Caplan discusses the conference and offers insight into other ethical issues of our day.

Why has biomedical ethics gained widespread attention? Dr. Caplan proposes that advances in technology have created ethical dilemmas, such as when to use technology to prolong life and when to stop it, and questions such as when death actually occurs. These issues simply did not exist a few years ago.

Euthanasia, specifically physician-assisted suicide, is currently under debate. Jack Kevorkian captured media attention with his suicide machine more than two years ago, and his actions have generated intense public reaction ever since. At its annual meeting in September, the MMA House of Delegates adopted a resolution stating that physicians, while they have an obligation to relieve pain and suffering, should not perform euthanasia or participate in assisted suicide. The American Medical Association previously adopted a similar resolution.

Still, the issue remains unsettled—



"Should we resist efforts to legalize our sincerest humanitarian efforts?"

both inside and outside the medical profession. Recently, a legislative panel in Lansing, Michigan, supported a bill that would allow physician-assisted suicide under strict safeguards. Last year, an attempt to legalize euthanasia in Washington state failed by only a narrow margin. California's ballot included a measure to legalize euthanasia, but Californians were not ready to accept euthanasia either.

Physicians do not agree among themselves on the ethics of euthanasia. An article by Timothy Quill, M.D., et al. in the November 5 *New England Journal of Medicine* supports physician-assisted suicide and proposes clinical criteria. "The idea of a noble, dignified death, with a meaning that is deeply personal and unique, is exalted in great literature, poetry, art, and music. When an incurably ill patient asks for help in achieving such a death, we believe physicians have an obligation to explore the request fully and, under special circumstances, consider ...

assisting with a suicide," write the authors. They ask us to consider compelling cases such as "a mother of seven children, continually exhausted and bed-bound at home with a gaping, foul-smelling, open wound in her abdomen, who can no longer eat and who no longer wants to fight ovarian cancer."

In California, although many physicians supported the proposal to legalize euthanasia, other physicians, as well as the state's medical association, opposed it. Psychiatrist William E. Vollero, M.D., of San Marino, California, says, "There's a certain price that the social order pays when physicians become killers. You undermine the tenets of the physician-patient relationship, which is always comforting and curing if possible. If a physician takes a life, it will feed into the patient's ambivalence about doctors."

Economics plays a significant role in this whole argument. Enormous costs are accrued to prolong the dying process. As one nurse asks in a Minneapolis-based *Star Tribune* commentary, is this money spent because of "respect and love for life" or because of "fear of death"? As physicians trained to save lives, maybe we have failed to acknowledge death as an inevitable consequence of life.

The question is, where do we draw the line? Should we resist efforts to legalize our sincerest humanitarian efforts? Would legalized physician-assisted suicide lead to more merciful treatment or would it undermine the physician-patient relationship? Such questions are painful to contemplate, especially as we approach what for many people the world over is a time of celebration. But, clearly in raising such questions, our goal is to find life-affirming answers.

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Biomedical Ethics Captures Center Stage

Minnesota Medicine interviews Arthur Caplan, Ph.D.

Medical ethicist Arthur Caplan, the witty, often brash, but highly quotable director of the Center for Biomedical Ethics at the University of Minnesota, is often found at the center of national medical debates. He has appeared on such shows as "Nightline" and "Today" and has been quoted in such prominent publications as Time and The Wall Street Journal regarding ethical dilemmas in medicine. His knowledge and personality may have thrust him into the center of debates, but issues related to the cost and success of medicine have put medical ethics at center stage, Caplan says in the following interview.

When Karen Ann Quinlan's parents demanded that doctors allow her to die in 1975, biomedical ethics gained national attention. Through the years, the right-to-die debate has not quieted, but rather has added new names: Busalacchi, Cruzan, and Wanglie come to mind. This month, the Center for Biomedical Ethics is focusing on the views of such families in a conference December 3-5 called, "Managing Mortality: Ethics, Euthanasia, and the Termination of Medical Treatment." Dr. Caplan, who planned the conference with Hennepin County Medical Center's Ronald Cranford, M.D., says he wanted the meeting to focus on those closest to the issues. "Something was missing from the many other programs Ron and I had attended. So much attention had been devoted to the problems faced by health care providers, ethics committees, risk managers, and third-party payers that somehow the voice of the most interested parties—patients and their families—had been lost," says Caplan in the center's newsletter. In the following interview, Dr. Caplan discusses the conference and such prominent biomedical ethics issues as assisted suicide, xenografting, and health care reform.

Dr. Caplan, who has a doctorate in philosophy from Columbia University, joined the University of Minnesota in 1987. Previously, he was associate director of The Hastings Center, a bioethics think tank in Briarcliff Manor, New York, and taught at Columbia's College of Physicians and Surgeons.

Minnesota Medicine: Dr. Caplan, please tell us a little about your early interest in ethics.

Caplan: When I graduated from Brandeis University in Waltham, Massachusetts, in 1971 with a major in philosophy, I was interested in the philosophy of science: What makes theories in science change? How do we know they are scientific? So I went to Columbia University in New York City to do graduate work in the philosophy of science, and I studied evolutionary theory, specifically whether it is a science and why. During the course of that work, ethical issues related to battles in the public schools over the teaching of evolution piqued my interest.



Arthur Caplan, Ph.D.

"Ironically, ethical questions are the price we pay for success."

Minnesota Medicine: When did your interest in medicine begin?

Caplan: I hadn't been interested in medicine or medical ethics when I went to graduate school, but while doing this work on evolutionary theory, I took a number of courses in genetics and physiology and in other areas of the biological sciences. I also taught a course on medical ethics to first-year medical students. Let me

tell you a short anecdote about that. The class was terrible. The students hated it. I think we had 180 students, but by the end of the course only 20 were coming, and they weren't coming happily. The problem was I didn't know anything about medicine. I was teaching philosophy to a group of students who wanted to become physicians, not philosophers.

To become more knowledgeable about medicine, I spent a couple weeks observing in a dialysis unit, but I still couldn't tell a physical therapist, from a social worker, from a nephrologist. At that point, the dean at the College of Physicians and Surgeons got me admitted as a special student to the medical school. So for 1976, I took medical courses and did a couple clinical rotations. That is really when my interest in medicine got going. I started to understand something about how hospitals are organized, and I became familiar with some of the issues.

Medical Ethics Moves to Center Stage

Minnesota Medicine: How did medical ethics gain such a prominent spot in the media, in state and national legislatures, and in medical societies at all levels?

Caplan: When I entered the field in the late '70s, early '80s, journals like *JAMA*, *The New England Journal of Medicine*, and other prominent journals rarely published articles on medical ethics, but such articles are common today. A combination of things has made that happen. One factor is that medicine has become very expensive, and people have begun to wonder whether we are spending too much money and, if we are, where we can make cuts. That raises questions about priorities, about resource allocation. The economics of health care has moved medical ethics to center stage. A couple other issues have fueled the interest in ethics as well. One is the success of medicine. Ironically, ethical questions are the price we pay for success. In the past 20 years, the ability to prolong life—to use technology both to diagnose disease and to extend life—has raised questions about when we ought to use this technology, when we should stop it, and who should be in control of it. That applies to premature infants and infants born with handicaps and, at the other end of life, to people with terminal illness or very old people.

Conference Examines Right-to-Die Issues

Minnesota Medicine: The Center for Biomedical Ethics is holding a conference early this month on ethics, euthanasia, and the termination of medical treatment and will include members of the Quinlan, Busalacchi, Cruzan, and Wanglie families. What was your objective in holding this conference?

Caplan: My co-chair for this meeting, Dr. Ronald Cranford, and I tried to put together a meeting that would look at questions of termination of treatment and the issue of euthanasia by letting some of the families and patients be heard. Most discussions of termination of treatment tend to be almost exclusively dominated by experts of one sort or another—sometimes physicians, sometimes lawyers, sometimes administrators, and even once in a while bioethicists. But you rarely hear from lay people—the people who have been at the center of these controversies. These people have been involved in battles at the bedside—some of them trying to get treatment stopped, others wanting it to continue; some cases have involved family members who were incompetent, others involved family members who were still competent. We thought it would be beneficial to let the families talk about how they think the system treated them. What are their attitudes about third-party interventions? Legal interventions? Judicial interventions? Do they think the system is in need of refinement or change in terms of public policy? Do they think the laws are wrong? They have expertise, and in all the rush to let the professional

“experts” pontificate on how things ought to be, their views will help. We are featuring the families—I believe for the first time at any conference—as experienced and thoughtful people who have been through situations that the rest of us can talk about only in the abstract.

Kevorkian Out of Line

Minnesota Medicine: Jack Kevorkian has grabbed headlines for several years and has shifted discussions about physician-assisted suicide from the abstract to the concrete. How do you react to Kevorkian's actions over the last few years?

“The economics of health care has moved medical ethics to center stage.”

Caplan: In some ways, I have to give him credit. He has brought the issue of physician-assisted suicide to the forefront. He's set out to make a point, and he's done it, whether I like it or anyone else likes it. On the other hand, I am still very opposed to what he wants to do, primarily for these reasons: First, I fear that at this time,

with too many people left outside the health care system because they are either uninsured or underinsured, making physician-assisted suicide legal would lead to abuse. It is a strange sort of good-news/bad-news situation: “The bad news is we can't pay for everybody, and we are thinking of rationing your care; the good news is we've got euthanasia for you.” Second, Kevorkian has been assisting suicide without regulation—without check. I have many difficulties with his activities, particularly with respect to the five women he's assisted in dying. He's done it without any review. He doesn't know these people very well. In some of the cases, the women weren't terminally ill. The first one, Janet Adkins, had been told she had Alzheimer's disease, but she was not imminently dying. She wasn't even suffering from any kind of serious impairment at the time he helped her die. Kevorkian has no training in psychology or psychiatry and is not qualified to determine whether a person might be asking for death because of depression or other psychiatric problems. Having the lead advocate in the euthanasia movement act as the judge, the jury, and, if you will, the executioner leaves much to be desired morally.

Minnesota Medicine: I noticed recently that a legislative panel in Lansing, Michigan, was considering a bill that would allow physician-assisted suicides under strict safeguards. Kevorkian denounced it as intrusive and unnecessary. How do you feel about this?

Caplan: My worst fears are stimulated when the Michigan Legislature suggests regulating this practice, and Kevorkian says no. Allowing people such as Kevorkian and others to follow their own conscience as their sole guide to what's right and wrong is not sufficient, especially when you're talking about assisting in suicide.

Finally, in my own mind, I'm not clear about whether we need to make a law about physician-assisted suicide. I think everyone understands that there are situations in

which physicians act to hasten the death of someone who is terminally ill and in a lot of pain that can't be controlled, but physicians usually don't set out to kill their patients. Physicians are usually willing to take risks with the use of morphine and other drugs if the goal is pain control. Lots of surveys have showed that about 10 to 20 percent of internists have engaged in behavior that probably hastens the death of a patient. I think people simply want adequate pain control and assurance they aren't going to suffer. They want to know they're not going to be imprisoned by medical technology. I don't see legalizing assisted suicide as the optimal solution to the public's fear. I think it violates physician ethics and is unnecessary.

Xenografting: Human Trials Not Yet Justified

Minnesota Medicine: The transplantation of animal organs to humans has been in the news recently. Does this give you any cause for concern?

Caplan: It gives me reason for full employment! Xenografting is a very tough issue. In a book of mine that was recently published called, "If I Were a Rich Man Could I Buy a Pancreas and Other Essays on Health Care Ethics," I argue that xenografting is ethical in principle. I do not see reasons in principle not to use animal parts as a way to solve the terrible shortage of donor organs from humans. However, the attempt in Pittsburgh to use a baboon liver as a permanent replacement and, more recently, the attempt in Los Angeles to use a pig liver as a temporary bridge until a human organ could be found are suspect ethically. I say this because xenografting is not to the point where human trials are justified. I hope that changes, but from what I understand, the immunological challenge of bridging the animal-to-human chasm biologically and genetically is still difficult, and we don't have the tools, even with the current generation of immunosuppressants, to do it with any confidence. I think we should be doing animal-to-animal trials, but I don't think the science is yet there for human application.

Also, I am concerned that using xenografting as a bridge replacement won't save more lives unless we also increase the availability of human organs for transplantation. We may change the identity of who gets a shot at a liver transplant from a human by using a pig organ, but a bridge when there is a terrible shortage of human organs is a bridge to nowhere. It doesn't get you anything when you take critically ill people, make them even sicker by transplanting pig organs, and then say, "Well, I hope they get a crack at the tiny pool of human donors."

Health Care Reform: All Must Sacrifice

Minnesota Medicine: What do you have to say about the ethics of state health care reform plans, such as Oregon's plan, which has been criticized because of its rationing component?

"To reform the health care system, everybody has to carry the load."

Caplan: I think Oregon deserves a lot of credit. The Oregon plan basically attempts to set priorities in the Medicaid program; they wanted to link expenditures to medical treatment that works and perhaps put more emphasis on prevention and early intervention and less emphasis on such procedures as treating a 500 gram infant in the neonatal unit—or transplanting a baboon liver. I don't have any problem with setting priorities. However, I do think it's wrong to ration health care or set priorities only on the Medicaid population. Oregon exempted the elderly and the disabled in the Medicaid program from its rationing scheme, so the only people who were actually to be affected were poor women and children. What I found ethically troubling was not the idea of setting priorities or rationing care, but rather that the burden of cuts would not be shared by everybody. If the program would have affected, say, the state legislators, then I would be confident that not too many important services would be excluded. If you are going

to reform the health care system, everybody in the community has to carry the load.

I am more sympathetic to Minnesota's Health Right legislation and its MinnesotaCare subsidized insurance approach because I don't think MinnesotaCare breaks my fundamental principle of bringing everybody on board and asking everybody to sacrifice. We didn't cut Medicaid benefits here; instead, we are looking for structural and economic changes to increase access. We are not asking the poor or those in the Medicaid program to finance that increase, which is what Oregon did. We also set up a commission to keep health care costs in balance and in check. Obviously, some means of cost-containment is going to have to be utilized both in Minnesota and around the country. The problem in Minnesota is that we've asked the commission to act as a kind of budget balancer, but I'm not sure it has the tools to do that. There are also difficulties in slapping a fixed limit on growth or expenditures—it can be a pretty haphazard process. If we don't tie cost-containment to things like outcomes research, I fear we might wind up containing costs, but not wisely.

Bioethics Field Is Fertile

Minnesota Medicine: What are your thoughts about the future of ethical issues?

Caplan: For physicians thinking about getting into the bioethics game as a subarea or career, it's fertile. The area of genetics, for example, is going to explode upon us. Questions are emerging about how genetic information will be utilized for testing and screening, how genetic counseling will change, whether and how genetic information will be used in the workplace, as well as questions about insurance eligibility, employment, and criminal identification. Certainly, we won't be free of ethical debates in the foreseeable future.

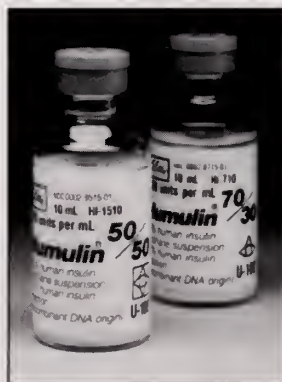
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Giving Brings Spirit of Enlightenment

Robert O. Fisch, M.D.

It is a season of contemplation—for some, the story of the three kings traveling to Bethlehem; for others, the hope of light during the longest period of darkness, or the presence of children and joyful excitement. For all of us, warm memories melt the present harshness of winter. The season is also about the spirit of enlightenment of all human beings who not only value this time for presents and material goods, but who also feel the need for something beyond everyday existence—who believe human relationships are more than give-and-take, that some one way of life could remain always as an illumination for others, just as the candlelights of Christmas and Hanukkah provide a burning symbol of the spirit and hope of humanity for the future.

The snowflakes peacefully fall from the sky on a late December evening. As I look through my window toward the St. Anthony Falls of the Mississippi River, a current of thought flows into my mind. When someone walks barefoot on the seashore, the coming waves gradually wash away the footprints, regardless of how deep they are. Most of our actions and materials—and even our own existence—eventually fade away without a trace. Few people have enriched my life, not materially, but spiritually. I have always been keenly aware of time, but in the presence of those exceptional persons who did offer spiritual enrichment, time became nonexistent; I could listen to their stories and observe their daily activities endlessly. Even when I left, they remained with me. Their presence made a mark upon me; their personalities, words, and deeds have been deeply engraved upon me and I will carry the marks with me as long as I exist. Who are my kings? Actually, I have a queen and three kings. Let me introduce them to you.

My queen's name was Anna. She was 18 years old and I was 8 months old when she came to our home as my nanny. My mother and father worked more than 12 hours each weekday and five hours

on Sunday. Anna became a member of our family. When she died at the age of 80, she was the last person to live in our home, which she kept as it had been long ago. At 22, she became very sick; she was bedridden and in a body cast for a year, and from then on every step was a hardship. But the physical handicap was not noticeable,

and her gentle personality and kindness came from her deep faith in Catholicism. She was always with me. Not only did we spend time and play together in the beautiful gardens of Budapest, but each Sunday I sat next to her during mass, which was just as natural for me as it was for her to celebrate all the Jewish holidays with us. From Anna I learned tolerance, kindness, and all the fundamentals a boy needed—in those days and always.

When I turned 18, I was taken to a working camp. My mother was hiding in her family home. In December 1944, Budapest was nearly surrounded by the

Russian Army. I was in a village 20 miles from the German border facing cold, snow, isolation, and the constant questions: What next? And when? Late one dreary afternoon, a limping figure gradually appeared in the gray snow beyond the barbed wire fence. Anna had come. She begged the guard, and I was able to meet her. I hugged her and kissed the gentle face of the one who had brought light into the darkness, hope in the time of greatest despair.

She brought a little food. Oh, how much that meant to me—the food she had saved for me by denying herself. She brought a wool blanket to keep me warm. I promised that if I stayed alive, I would bring it back. I learned afterward that she had reached the last train before the surrender of Budapest, hanging onto the crowded train steps in the cold winter during the furor of the war, risking her life to bring me bread and hope and warmth. I returned the blanket as promised, but her warmth remained with me always.

Continued



Illustration by Robert Fisch, M.D.

His name was Uncle Kazi. He had silvery hair and always a smile and kind, soft words. I first met him when I arrived as a district doctor in the Hungarian mining town of Tatabanya. He was my superior, the head of the Public Health Department. In the years that followed, I heard a lot about him, and I was fortunate to win his friendship. His father was a wealthy landlord in the most fertile area of the country. The estate had belonged to the family for centuries. In spite of the customary separation that existed between classes in those days, all the workers on Kazi's land ate lunch at his large dining table in the mansion, and Uncle Kazi cut the meat and served everyone personally. Uncle Kazi was a legend in the town for helping the miners. When the Communist authorities tried to prosecute him, an open-street protest by the miners freed him in an unprecedented episode during the Communist regime.

Each summer, he spent his vacation in his home at Tihany, the most beautiful spot on Lake Balaton. The home, worn down by time and lack of money, no longer maintained its original elegance and grandeur. The house faced the lake, and birch trees lined the road on both sides. Uncle Kazi and his wife, Ilike, took their favorite puli dog and all their domestic animals—chickens, ducks, geese—with them for “vacations.” They never killed or ate any of the fowl, which roamed freely in the house. Next to the house was a large building with a beautiful garden. Employees of the Hungarian National Bank used it for free two-week summer vacations.

After one delicious dinner at Uncle Kazi's, we were sitting on the balcony enjoying the sunset and the light breeze. I asked about the building next to the house—who had built it and when? “Oh, that was mine. We built it for a private 24-bed sanitarium prior to the Second World War. The Communists nationalized it.”

“That was yours?” I asked. “Aren't you upset by such an injustice? When you see the building day in and day out, aren't you irritated?”

He looked at me with his gentle smile and said, “You know, my dear friend, Robi, this way, it might now be enjoyed better by so many more.”

I first met Dr. Robert Rosenthal during my internship at Children's Hospital in St. Paul. Although he was a solo practitioner until he retired at 86, he had the energy and insight to become one of the best-known medical historians, collectors, and scholars. And above all, he was a very sensitive, kind, giving human being.

Dr. Rosenthal's wife frequently accompanied him on house calls. Leaving Children's Hospital in St. Paul late one evening, he told his wife of his despair over a little boy who had been uninterested in food for days and was dying. At that time, IV solutions and hyperalimentation were unknown, and the child's prognosis was grave. Late that evening, Mrs. Rosenthal made cookies in the shape of toys and animals, and at 1 a.m., Dr. Rosenthal brought the cookies to the child. The little boy opened his eyes, smiled, reached for the cookies, and started to eat.

Through his medical knowledge, Dr. Rosenthal was able to provide wellness for his patients as well as

transfer medical wisdom and history from Latin, Hebrew, German, and other cultures to many. His greatest talent was giving. He was an endless source of information on trees, drugs, customs, legends, and stories, which he loved to share with friends. I was privileged to know him well.

The king above all others was my father. His presence radiated love and compassion; his way of life combined values and human relationships in the finest way. To live with him was like living in a dreamy fairy-tale world where gentleness overwhelmed power, where kindness removed rudeness, where giving made it unnecessary to ask. There was the refugee musician who needed a dinner jacket for performances; without question, my father bought one for him. At the market where he worked, not a day passed without someone looking for help—money, food, or clothing; I never saw my father turn a person away. He gave effortlessly. His favorite motto was, “Live and let live.”

But at that time, the world around him used another motto—the motto of final solution: “Erase them and kill.” After arriving in one of the termination camps and seeing the hungry ones, my father shared his last meal with someone, saying, “I always have enough.” Even the most extreme human brutality could not alter his way of living, yet it took his life away. But even there, people recognized his uniqueness, and he was the only one buried individually, in the Jewish Memorial Cemetery for Martyrs in Budapest, rather than in a common grave. He gave me guidance about how to live as a human being in every circumstance.

What did these people have in common? They were not looking for external rewards; their wealth was in their nature, and giving made them richer—a phenomenon paradoxical in the physical sense and natural in the spiritual one. The joy of giving brings enlightenment. Think about your own kings and queens—your loved ones, friends, others you care for or who need your help; their presence and their memories should enlighten you inside, as candles light our rooms during these special days. I hope that all of us, in our work and in our lives, will have an impact on others, and that traces of our footprints will remain not only temporarily on the fading shoreline, but permanently in others.

I hope that you will receive the spirit of enlightenment in the coming days, and that you will experience the joy of giving.

MM

Robert Fisch is a professor of pediatrics at the University of Minnesota and a staff member at St. Paul-Ramsey Medical Center.

The Futility and Lack of Cost-Effectiveness in Screening for Cancer

Seymour Handler, M.D.

The medical profession and the general public enthusiastically support the premise that early detection will improve outcomes in cancer, but the concept is not supported by data. Lung cancer survival is not improved by "early" detection, and current screening technology for colon, prostate, and breast cancers have failed to demonstrate efficacy. Instead of promoting unproven screening tests, scarce resources should be used to examine the American lifestyle factors that epidemiologically are linked to cancer.

The concept of early detection is attractive and makes eminently good sense. Solid tumors start small, steadily grow, and at some time metastasize to other parts of the body where cure usually is impossible. Theoretically, if the tumor is detected early, surgical removal should be curative if the cancer is confined to its place of origin. This basic tenet in oncology is widely accepted. Everyone "knows" that early detection is the key to successful cancer therapy. Early detection is the essence of the American Cancer Society's program of cancer control. Since the incidence of cancer is clearly not declining, the next best thing is to detect cancers early enough to cure them.

The above philosophy is the origin of two erroneous beliefs. First, the American public and organized medicine believe cancer prevention is neither feasible nor practical. The public is disinclined to change its lifestyle to accomplish prevention, and physicians appear more interested in therapy than disease prevention. The public delegates responsibility for health to the doctors; personal responsibility is not accepted. From the physician's viewpoint, although we pay lip service to the concept of preventive medicine, what

we really do is treat disease. There is scant financial incentive for physicians to spend the time necessary to convince their patients that only they can prevent disease. Doctors are re-

"It is incumbent upon physicians to direct their efforts to proven measures, not diagnostic optimism unsupported by facts."

imbursed for treating, not for giving patients good advice. The only significant exception to this belief is cigarette smoking, the recognized cause of about 200,000 deaths per year. Besides the attention given cigarette-caused malignancies, little effort is directed toward altering other etiologic factors for cancer. There is a decided reluctance to act upon the impressive epidemiologic evidence indicating that factors in the Western world lifestyle are to blame. Since society and physicians are unwilling to address the convincing epidemiologic data, let us turn to the second erroneous belief—that early detection will have a significant impact on cancer treatment outcomes.

The major cancers afflicting the Western world are lung, breast, colon, prostate, uterus, and stomach.¹ Gastric cancer has already declined 75 percent in the United States over a 40-year period, and not because of anything medical science has done. Although debated, improved preser-

vation of food is widely believed to be the reason for the decline. Except for Japan, no group suggests that early detection is of value to further hasten the decline of stomach cancer.

Uterine cancer has had a similar significant decline in mortality for 40 to 60 years. Although cervical cytology is given much of the credit, those with a historical perspective of disease recognize that the decline preceded widespread use of Pap smears by about 30 years. Why has mortality from cancer of the cervix dramatically declined? We really don't know. If anything, the social factors that contribute to the incidence of cervical cancer have increased over recent decades—sexual promiscuity, early onset of sexual activity, multiple sex partners, sexually transmitted disease, etc. Undoubtedly, invasive cervical cancer mortality would not have declined as dramatically without the increased use of Pap smears, which constitute a useful and relatively inexpensive early detection tool. However, we must recognize that Pap smears have not been the only factor in the decline of cervical cancer mortality.

No respectable authority questions that cigarette smoking causes at least 90 percent of lung cancers and a host of other related malignancies—pharynx and oral cavity, larynx, esophagus, urinary bladder, etc. Instead of early detection, the far better way to control these malignancies is to reduce cigarette smoking. Major progress has already occurred, but we have a significant way to go. Early detection of lung cancer by any of a variety of procedures has repeatedly proven ineffective.² Frequent chest x-rays and sputum cytology have not provided early detection or decreased mortality.

Where does that leave us? We are

now in a frenzy of activity detecting cancers of the breast, colon, and prostate, ostensibly sufficiently early to effect primary surgical cure, i.e., removal of the tumors before they metastasize. The goal is laudable; the performance less impressive. Perhaps worse than our inability to achieve success is the dishonesty of the methods employed. We have convinced ourselves—and the general public—that techniques already available and in practice are effective in detecting these cancers sufficiently early to effect surgical cure. This belief leads to expenditure of billions of health care dollars annually. Unfortunately, the validity of these efforts is more wishful thinking than hard data. Let us discuss three cancers in greater detail.

Colon Cancer

The belief that screening tests are capable of early detection of colorectal cancer is not supported by available data. Recent reviews^{3,4} reemphasized that fecal occult blood testing (FOBT) and flexible sigmoidoscopy (FS), although widely promoted and practiced, have failed to decrease mortality in repeated studies. Despite this failure, several major organizations—the National Cancer Institute, the American Cancer Society, the American College of Physicians—continue to recommend the tests be performed every three to five years.

In addition to the lack of any study proving efficacy in reducing colon cancer mortality, simple examination of FOBT should convince us of the test's insensitivity and lack of specificity. A screening test should be very sensitive for the disease; i.e., very few patients with the disease should be negative. FOBT is supposed to detect early colon cancers, stage A tumors, and the larger adenomatous polyps that are predisposed to becoming cancers. To be detected by FOBT, the lesion must leak 20 ml blood per day into the stool. By their nature, the small cancers and the large polyps do not bleed enough to cause a positive FOBT. Lesions large enough to bleed that much are usually symptomatic, deserving clinical evaluation. At best, FOBT detects only 10 percent to 30 percent of

cancers and a much smaller percentage of polyps. False-positive tests, unfortunately a common occurrence, demand expensive and anxiety-producing evaluation. Therefore, FOBT suffers in two ways: it is an insensitive screening test, and because of many false positives, it is insufficiently specific. These facts have been summarized by the U.S. Preventive Services Task Force.³

Despite the lack of evidence supporting FOBT as an effective preventive medicine tool, many national organizations and individuals^{4,5} continue to recommend its use in asymptomatic populations. The argument put forth is that it "makes sense" or that it is "prudent" to continue to use FOBT until something better comes along. What "makes sense" to me is what works, not vague intuition. What is "prudent" is to distinguish between "doing something" and "doing something worthwhile." Rather than spend large sums of money annually performing tests of unproven value, we should spend money educating the public that the American diet predisposes people to an abnormal colonic environment, which ultimately causes colon cancer.

Similarly, flexible sigmoidoscopy, although a far more specific test, loses sensitivity because it does not cover the right colon. Flexible sigmoidoscopy also causes discomfort and is expensive. Studies thus far have not demonstrated any yield in reducing colon cancer mortality.⁶

Prostate Cancer

The current enthusiasm for early detection of prostate cancer is the result of an unfortunate combination of new diagnostic tools^{7,8} and media misinformation. The media learned that new tests for prostate cancer diagnosis are available. That information, plus the knowledge that prostate cancer is a significant contributor to cancer mortality in men, permitted the media to oversimplify the complex and poorly understood natural course of prostate cancer. To the lay mind, cancer is a fatal disease, and when a cancer is diagnosed, it must be treated. With the newer diagnostic tools, we should be able to detect prostate cancer early and save

lives. Sounds simple and straightforward, doesn't it? Unfortunately, prostate cancer behaves differently than other solid tumors, and we must understand its natural progression before embarking on intensive diagnostic work and treatment.

The natural course of prostate cancer does not follow simple rules of cancer behavior. The majority of prostate cancers do not act like cancer; many tumors neither kill the patient nor cause significant morbid-

"The majority of prostate cancers do not act like cancer; many tumors neither kill the patient nor cause significant morbidity."

ity. The patient often dies of other causes without knowing he has a prostate cancer. We have long known that prostate cancers are increasingly common in men as they age. Careful examination of prostates at autopsy reveals cancer in as many as 30 percent of 75-year-old men. Half of men in their 80s have a prostate cancer. Since the incidence of clinical prostate cancer is much less than those figures, it is apparent that many prostate cancers are unimportant, and if not diagnosed, will not cause the patient any harm. Some estimates⁹ suggest that seven of eight prostate cancers are clinically insignificant. If prostate cancer is so prevalent, and if the great majority cause no problems to the patient, why the concern? The problem arises from several diagnostic improvements permitting more diagnoses of prostate cancer. Indeed, the incidence of diagnosed prostate cancer has dramatically increased these past few years.^{1,10} Nobody suggests that this increase is real; rather, it is solely the result of increased diagnosis.

The three new tools for diagnos-

ing prostate cancer are prostate-specific antigen (PSA) testing on serum, prostate ultrasonography (US) to detect small and non-palpable cancers, and the fine needle biopsy gun, which permits excellent biopsies in the outpatient setting. PSA is becoming an increasingly popular screening test for cancer in older men. When increased serum PSA levels are detected, ultrasonography is performed, and, frequently, small cancers are identified and confirmed by fine needle biopsy. Isn't this progress? Isn't this wonderful? Aren't we detecting more cancer? We are, indeed, detecting more cancers of the prostate, but I doubt if detection is providing our patients a worthwhile service. Even if the urologist appreciates that many prostate cancers are of little or no biological significance to the patient, once the patient is aware of the cancer, he's certainly not going to sit still. That's not the American way. When a patient learns he has cancer, he wants it treated. If radical prostatectomy is not elected, then the patient receives radiation therapy, and in some cases, hormonal manipulation.

A recent Swedish study¹¹ points out that "no randomized trial has documented the possible therapeutic benefit of radical treatment of early prostatic cancer." The Swedish data showed that only a very small percentage of men with untreated prostate cancer died of the disease over a 10-year study period, and that, therefore, controlled clinical trials to evaluate the efficacy of prostatectomy are needed before radical surgery is performed for a disease with a benign course. The Swedish study suggests that, if we are not to subject millions of men to therapy for a disease with a benign course, the steamroller of medical or surgical activity must be controlled.

The propensity for action has the potential for inflicting a lot of harm. If seven of eight prostate cancers are of minor or no biological significance, their detection in the asymptomatic patient is potentially harmful. We do not want to treat diseases that are of no consequence. Unfortunately, therapy will be the outcome of most cases once diagnosed.

US, PSA, and improved needle biopsies not only present the potential for detection and treatment of unimportant tumors, but they are not very good screening tests—

"To the lay mind,
cancer is a fatal
disease, and when a
cancer is diagnosed,
it must be
treated."

statistically speaking. Although relatively simple to perform, US fails to detect many palpable cancers (30 percent false negatives) and detects many hypoechoic areas that are not cancer. Further, although serum PSA is a distinct improvement over earlier tests, there are many false positives (BPH, prostatitis, etc.) and false negatives. False positives generate unnecessary additional diagnostic testing; false negatives give a misleading sense of security.

We must not let the dog walk the man. The disease determines the outcome for the patient, not advancing diagnostic technology. It is incumbent upon us to understand the natural course of disease—prostate cancer in this discussion—before we permit practice to be driven in unwise directions and to cause potentially adverse outcomes for our patients.

Breast Cancer

Following reports of the Health Insurance Plan (HIP) of New York^{12,13} and the Swedish National Board of Health and Welfare,¹⁴ mammography to detect early breast cancer became standard recommended practice. The ability of mammography to detect breast cancers before the tumor is palpable is not in question. Indeed, lesions less than 1 cm in diameter, the size of palpability, are regularly detected by mammography. The improved outcome of treating very small cancers, those less than 1 cm in diameter, has been demon-

strated. What is questioned is the improvement in population cancer statistics—can mammography reduce the mortality of breast cancer? Recent studies¹⁵⁻¹⁷ have raised significant questions about the yield of periodic mammography, particularly if the negative aspects are considered along with the relatively insignificant improvement in survival. One study¹⁷ reexamining the data of the HIP study points out a statistical shortcoming. Some 35 percent of HIP subscribers declined participation in the program, either as the screened or the control group. This group of non-participants had a lower breast cancer incidence and mortality than either the screened or control groups. Interesting phenomenon, is it not? This important bit of data has conveniently been overlooked or ignored. This may be one of the statistical artifacts of such a study—self-selection by individuals who consider themselves at greater risk.

Following the early HIP and Swedish studies, subsequent controlled and prospective studies¹⁶ have been much less convincing of the ability of mammography to positively affect breast cancer outcomes. The more recent Malmö, Sweden, study¹⁸ suggested that 65,000 women would have to be screened to benefit one woman. Even in our country, that's a lot of money and effort for a very small yield.

A recent Canadian (Breast Cancer Detection Demonstration Project) study¹⁶ of almost 300,000 screened women raised some disquieting questions. Approximately 5 percent of the women screened had positive screens, and only one-tenth of these had cancers. Of the cancers, one-fifth were in-situ tumors, many of which never become biological cancers. For every cancer detected, nine women without cancer were subjected to the emotional and physical trauma of a biopsy. That's a lot of "harm" for a very small benefit. For unexplained reasons, even though the screened group had a minuscule reduction in breast cancer mortality, overall mortality in the "screened" group was higher than in the control group. Further, lead-time bias in any program designed to detect cancer early

makes survival statistics a matter of great debate. In summary, some observers¹⁶ have stated that the American Cancer Society and the National Cancer Institute recommendations should be ignored in view of the net harm caused by screening for breast cancer.

It has been suggested¹⁵ that screening for breast cancer be limited to high-risk populations, rather than all women at particular ages. Can we define "high risk"? We certainly would include women with breast cancer in first-degree relatives, obese women, women with endometrial cancer, and women with fibrocystic disease with duct hyperplasia. Perhaps better selection of patients at higher risk would improve the lack of cost-effectiveness of any screening program. Perhaps the low sensitivity and specificity of current mammography can be improved. Without such a change, we may well continue to spend a lot of money, inflict a lot of harm, and still not affect the outcomes of breast cancer.

Discussion

I recognize that the above nihilistic philosophy is not easily accepted by either physicians or the general public. Nevertheless, with our burgeoning health care cost inflation, it is incumbent upon physicians to direct their efforts to proven measures, not diagnostic optimism unsupported by facts. Unfortunately, since we have sold screening to the public and the government, it is difficult to step back and admit we don't have supportive evidence.

Rather than do a battery of unproven tests to detect early cancer small enough to successfully remove surgically, would it not be better to prevent the cancer in the first place? Instead of throwing billions of dollars annually at screening of asymptomatic populations, why not examine the impressive epidemiologic data indicating the several factors involved in the etiology of cancer? If just a small percentage of the money spent on screening was used to understand how the Western lifestyle contributes to or promotes our common cancers, perhaps we would be practicing preventive medicine in its

purest form—prevention of disease rather than early detection. We already know the direct etiologic relationship between cigarette smoking and various malignancies. There is equally convincing evidence that the American lifestyle, notably our rich diet, contributes to our cancer epidemic.

Conclusion

Despite the public and physician enthusiasm for screening tests to detect cancer early, the value of these tests in colon, breast, and prostate cancer is unsupported by available data. In addition, in screening for prostate cancer, there is a legitimate concern that clinically unimportant cancers will be detected and diagnosed, leading to unnecessary therapy. Rather than expend scarce health care dollars for unproven screening, more efforts should be made to educate the public on the etiology of our major cancers. The relationship between cigarette smoking and several cancers is clear; the relationship between the American diet and other malignancies should be.

MM

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REFERENCES

1. Boring CC, Squires TS, Tong T. Cancer statistics, 1991. *CA* 1991;41:19-36.
2. Fontana RS, Sanderson DR, Woolner LB, Taylor WF, Miller WE, Muhn JR. Lung cancer screening: the Mayo program. *J Occup Med* 1986;28:746-50.
3. Knight KK, Fielding JE, Battista RN. Occult blood screening for colorectal cancer. *JAMA* 1989;261:586-93.
4. Ransohoff DF, Lang CA. Screening for colorectal cancer. *N Engl J Med* 1991;325:37-41.
5. Eddy DM. Screening for colorectal cancer. *Ann Intern Med* 1990;113:377-83.
6. Selby JV, Friedman GD. Sigmoidoscopy in the periodic health examination of asymptomatic adults. *JAMA* 1989;261:595-601.
7. Catalona WJ, Smith DS, Ratliff TL, et al. Measurement of prostate specific antigen in serum as a screening test for prostate cancer. *N Engl J Med* 1991;324:1156-61.
8. Stamey TA, Yang N, Hay AR, McNeal JE, Freiha FS, Redwing E. Prostate-specific antigen as a serum marker for adenocarcinoma of the prostate. *N Engl J Med* 1987;317:909-16.
9. Chodak GW, Schoenberg HW. Progress and problems in screening for carcinoma of the prostate. *World J Surg* 1989;13:60-4.
10. Minnesota Department of Health. Age, sex-specific and standardized cancer rates. Minneapolis, Minnesota: Minnesota Department of Health, 1991.
11. Johansson JE, Adami HO, Andersson SO, Bergstrom R, Holmberg L, Krusemo UB. High 10-year survival rate in patients with early, untreated prostatic cancer. *JAMA* 1992;267:2191-6.
12. Shapiro S. Evidence on screening for breast cancer from a randomized trial. *Cancer* 1977;39:2772-82.
13. Shapiro S, Venet W, Strax P, Venet L, Roeser R. Ten- to fourteen-year effect of screening on breast cancer mortality. *J Natl Cancer Inst* 1982;69:349-55.
14. Taber L, Fagerberg CJ, Gad A, et al. Reduction in mortality from breast cancer after mass screening with mammography. *Lancet* 1985;1(8433):829-32.
15. Strax P. Mass screening for control of breast cancer. *Cancer* 1984;53(Suppl):665-70.
16. Wright CJ. Breast cancer screening: a different look at the evidence. *Surgery* 1986;100:594-8.
17. Skrabanek P. False premises and false promises of breast cancer screening. *Lancet* 1985;2(8450):316-20.
18. Andersson I, Aspegren K, Janzon L, et al. Mammographic screening and mortality for breast cancer: the Malmö mammographic screening trial. *Br Med J* 1988;297:943-8.

Medicine's Battle with Cancer

Screening Still Key Element of Armamentarium

Harry J. Long, M.D.

Editor's Note: At Minnesota Medicine's request, Dr. Long prepared this editorial as a response and counterpoint to Dr. Seymour Handler's paper "The Futility and Lack of Cost-Effectiveness in Screening for Cancer" (page 13).

Dr. Seymour Handler presents a provocative but somewhat biased paper entitled "The Futility and Lack of Cost-Effectiveness in Screening for Cancer" (page 13). He reviews various "facts" regarding the role of screening for cancers of the breast, uterus, colon, prostate, and lung. For the most part, his review of the facts is accurate, although his interpretation of their significance can be questioned.

He states that "early detection is the essence of the American Cancer Society's program of cancer control." In fact, early detection is just one objective of the American Cancer Society's public education and professional programs; prevention and treatment are recognized as having equal importance.

The National Cancer Institute's "Cancer Control Objectives for the Nation: 1985-2000,"¹ issued in 1986, set a goal to reduce by 50 percent the cancer mortality rate by the year 2000. It outlined a multifactorial approach to accomplish this goal utilizing all currently known modalities for reducing cancer mortality, including cancer prevention, early diagnosis through cancer screening, improvements in cancer treatment, and surveillance to monitor progress toward achieving the objectives.

The report recognized that 910,000 Americans would develop cancer in 1985, and 462,000 Americans would die of the disease within the year. It also recognized that the incidence of cancer had been rising in

the United States and that a multi-pronged approach was necessary to achieve the year-2000 goals. According to NCI projections, implementation of these cancer control initia-

"To have any major impact on cancer mortality, we need to take advantage of every modality available to us."

tives would result in a 21.3 percent reduction in mortality for men and a 21.7 percent reduction for women.

Prevention

Dr. Handler argues that there are two widely held erroneous beliefs related to cancer prevention and detection: The first belief, shared by the the American public and organized medicine, he claims, is that "cancer prevention is neither feasible nor practical." The second is that "early detection will have a significant impact on cancer outcomes." Addressing the first point, I would argue that the majority of practitioners in the field of cancer diagnosis and treatment strongly believe cancer prevention is feasible and practical, at least with respect to smoking and smoking-related cancers. Too little is known about the dietary and nutritional factors that cause cancer to implement broad-scale dietary prevention programs. Notably, however, as environmental and workplace carcinogens are identified, the Environmental Protection Agency, the Occu-

pational Safety and Health Administration, the Food and Drug Administration, and the U.S. Department of Agriculture regularly implement restrictions on carcinogen release and exposure. This, in effect, prevents the development of carcinogen-related cancers in the American public.

Currently, and unfortunately, lung cancer is the only cancer for which firm evidence exists that prevention/intervention can reduce mortality. With cigarette smoking widely recognized as the greatest single cause of lung cancer, any efforts at reducing the incidence and mortality of lung cancer need to be directed at smoking cessation.

It is true that we are not doing enough to eradicate tobacco use by Americans, although we have made great strides in the past 20 years, as evidenced by a reduction in the rate of cigarette smoking in American men from 48.4 percent in 1959 to 24.4 percent in 1982.² The decline among women during that time was less pronounced, from 27.2 percent to 21.5 percent. The frequency of ex-smokers increased in both sexes during this same interval. The incidence of lung cancer and related mortality have decreased in men during the past 10 years and are leveling off in women. Minnesota has led smoking cessation efforts nationwide by being the first state to enact clean indoor air legislation, restrict cigarette vending machine access, and increase taxation on tobacco products, but more work needs to be done.

Numerous epidemiological studies suggest that dietary factors may influence the rate of breast cancer, endometrial cancer, and gastrointestinal cancers, although firm scientific data are relatively nonexistent in this field.³ Nonetheless, both the National Cancer Institute and the American

Cancer Society have recommended reducing fat consumption from the current average of 37 to 40 percent of total caloric intake to 30 percent or less. They have also recommended an increase in consumption of dietary fiber from the current average of 8 to 12 grams to approximately 20 to 30 grams per day.³

Screening

Regarding Dr. Handler's second contention, that the public and the medical community erroneously believe early detection will have a significant impact on cancer treatment outcomes, he is correct in noting the failure of early detection to improve mortality in lung, colon, and stomach cancer in the United States. His interpretation of the data concerning breast cancer and uterine cancer, however, is in error. The only screening modalities that have been definitely proven to result in earlier diagnosis and a reduction in mortality are mammography for breast cancer and Pap smear screening for cervix cancer.³ Numerous studies have scientifically confirmed the effectiveness of these screening modalities in detecting breast and cervical cancers at earlier stages, and substantial evidence supports an improved survival rate in earlier-stage disease.^{4,5}

The available data indicate that a greater percentage of women are receiving mammography screening today than in the 1960s and 1970s,⁶ when the trials Dr. Handler describes were being carried out. There has been a demonstrable downstaging of breast cancer at the time of diagnosis over the past 10 years; in most centers that utilize mammography screening, more than 50 percent of patients diagnosed with breast cancer have primary tumors of less than 2 cm with negative axillary lymph nodes.⁵ Less than 10 percent of patients now present with stage III or stage IV disease, in contrast to the approximately 30 percent of patients 10 to 15 years ago who presented with cancer that had progressed to these stages.⁷ The increased screening has resulted in a higher incidence of diagnosed breast cancer in predominantly white women in the United States;³ however, because the lead

time from diagnosis to death in early-stage breast cancer is measured in decades, we are just beginning to see a reduction in overall breast cancer incidence and mortality as a result of the screening implemented in the last 10 years.⁸

The death rate from cancer of the cervix has continued to decline since the implementation of Pap smear

"Prostate cancer screening is currently undergoing a revolution."

screening in the late '40s and early '50s, and over the 14-year period from 1973 to 1986, it declined nearly 40 percent.³ The incidence of cervical intra-epithelial neoplasia and carcinoma in situ has increased during this time, reflecting the effect of Pap smear screening on diagnosing precancerous and early cancerous changes in the uterine cervix.⁴

The role of screening in prostate cancer is currently undergoing a revolution, and it is too early to determine whether the advent of prostate-specific antigen (PSA) screening for men over age 50 and high-risk men over age 40 will result in decreased mortality. Preliminary reports strongly indicate that diagnosis of the disease is occurring at earlier stages, similar to the downstaging seen with Pap smear screening in cervical cancer.⁹

At least two large studies have demonstrated that PSA screening of asymptomatic men over age 50 has an overall detection rate of approximately 2.5 percent for prostatic carcinoma, which is nearly twice the rate seen with digital rectal examination (DRE).¹⁰ Between 32 percent and 38 percent of these PSA-detected cancers were not palpable by DRE. Unfortunately, PSA has a false-negative screening rate of approximately 20 percent, and the false-positive rate is as high as 25 percent. Further refinements of PSA, perhaps with transrectal prostatic ultrasound, may

make this a better screening test in the future. Until then, it seems appropriate to use PSA for prostatic cancer screening since it is the best currently available screening test and yields diagnosis in stage A and B, when prostatic carcinoma is most curable.¹⁰

Dr. Handler states that seven out of eight prostate cancers are of minor or no biologic significance, but he has no scientific data to support his claim. We do not know what the natural progression is from in-situ carcinoma to localized invasive disease and to local regionally advanced and metastatic disease, since all available literature reports survival following primary treatment at a given stage. If, for instance, it takes 10 to 15 years for prostatic cancer to progress from carcinoma in situ to local regionally advanced disease, detecting any survival advantage of early treatment will require large numbers of patients to be followed post-treatment for 20 to 30 years. PSA and early diagnosis have only been with us for five years, and it will be many years before Dr. Handler's premise can be evaluated. In the meantime, do we disregard the obvious and wait for those results, or do we proceed with the best available therapeutic options based on what we currently know?

Conclusion

In summary, Dr. Handler presents a somewhat provocative, although biased and cynical, review of the current status of cancer screening in the United States. He is correct in stating that he presents a "nihilistic philosophy... not easily accepted by either physicians or the general public." He manipulates and disregards the currently available data supporting the role of screening in the early diagnosis of and reduced mortality from breast cancer and cervical carcinoma. He prematurely buries the value of PSA screening for early diagnosis of prostate cancer without adequate long-term evaluation to determine whether early diagnosis affects mortality. He is willing to abandon cancer screening and shift health care dollars into education of the public concerning the etiology of our major cancers.

Unfortunately, with the excep-

tion of the link between tobacco use and certain cancers of the upper aerodigestive tract and lungs, there is no scientific evidence supporting the role of prevention in reducing the mortality of cancer.

I hope practicing physicians recognize Dr. Handler's stilted perspective. If we, as practicing physicians, are to have any major impact on cancer mortality, we need to take advantage of every modality available to us. This includes prevention when etiologic factors are known and can be modified; screening when it leads to early diagnosis of diseases that can be more successfully treated at an early stage; appropriate adjuvant therapy in patients who are diagnosed in a late stage of disease; and aggressive, multi-modality treatment in patients with advanced disease, when such treatment has been demonstrated to affect mortality. We will do the most to reduce cancer mortality in the United States by waging the battle on multiple fronts. **MM**

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REFERENCES

1. NCI Monographs, Cancer control objectives for the nation: 1985-2000. Bethesda, Maryland: U.S. Department of Health and Human Service, Public Health Service, National Institutes of Health, National Cancer Institute, 1986.
2. Stellman SD, Garfinkel L. Smoking habits and tar levels in a new American Cancer Society prospective study of 1.2 million men and women. *J Natl Cancer Inst* 1986;76:1057-63.
3. Sondik EJ, Edwards BK, Hankey BF, Gloeckler-Ries LA, eds. Cancer statistics review 1973-1986. Bethesda, Maryland: U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, National Cancer Institute, 1989. NIH publication no. 89-2789.
4. Nelson JH, Averette HE, Richart RM. Dysplasia, carcinoma in situ, and early invasive cervical carcinoma. *CA* 1984;34:(6).
5. Baker LH. Breast cancer detection demonstration project: five-year summary report. *CA* 1982;32:(4).
6. 1989 survey of physicians' attitudes and practices in early cancer detection. *CA* 1990;40:(2).

7. Cutler SJ. Classification of extent of disease in breast cancer. *Semin Oncol* 1974;1:91-6.
8. Miller BA, Gloeckler-Ries LA, Hankey BF, Kosary HL, Edwards BK, eds. Cancer statistics review 1973-1989. Bethesda, Maryland: U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, National Cancer Institute, 1992. NIH

publication no. 92-2789.

9. Brower MK, Lange PH. Prostate-specific antigen and premalignant change: implications for early detection. *CA* 1992;42:(4).

10. Littrup PJ, Lee F, Mettlin C. Prostate cancer screening: current trends and future implications. *CA* 1992;42:(4).



K. James Ehlen, M.D.
Chairman, CEO Medica

MANAGED CARE, JUST A LABEL OR VALUABLE CONTENTS?

The concept of managed care has been more popular and has produced lower costs in Minnesota than in most other areas in the U.S. But increasingly, employers nation-wide are moving toward managed care and away from traditional indemnity health insurance plans.

A recent national survey by KPMG Peat Marwick shows that 56 percent of American workers were enrolled in a managed care plan in 1992, up from 47 percent last year.

Clearly, managed care is attracting purchasers who see value in the product beyond the benefits of traditional insurance. They see managed care as a systematic approach that moderates the use of health care services and delivers measurable quality.

Medica's approach helps patients find the right care, at the right time and in the right setting. We evaluate both the performance of our entire system and the outcomes for individual patients to express quality of care. Appropriate care, which meets patients' needs properly, is going to be the low-cost solution.

The effectiveness of this approach—concentrating on quality—is also described in the Peat Marwick study: HMOs had the lowest premium increases in 1992, below those of PPOs, POS plans and indemnity insurance plans.

Medica's interest in quality care for patients aligns with the MMA's interest in the accessibility, affordability and accountability of medical care, described as "the three A's" by Dr. Stuart Hanson in the November issue of *Minnesota Medicine*.

To expand on that theme, I'll be using this space during 1993 to show you how Medica's mission statement—"to be the leader in improving the quality, affordability and accessibility of health care"—focuses the Plan's efforts to add value to the health care process.

MEDICA

*public
image*

Last June the American Medical Association led 500 physicians, employees, and their families on a march down Chicago's Michigan Avenue to protest R.J. Reynolds' "Old Joe Camel" advertising campaign. The event was staged to capture media attention and

Physician *image* needs doctoring

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By Miriam K. Feldman

demonstrate that doctors really do care about the public health—in this case, the well-being of children, whom the AMA believes are targets of the tobacco company's ads.

"I have a reason for this event mentality," says Daniel Maier, director of the AMA's Department of News and Information and the march organizer. "In the past, we could put out a press release and say we're against smoking. But the public is sophisticated. ... Today you have to be more creative." For Maier, that means getting to know every reporter he can, developing mailing lists, making media visits, organizing special projects, and staging events. Good news doesn't make

headlines, Maier argues, but he makes sure good news happens and that the media are around to hear about it. Surely, 500 members of the medical establishment taking to the streets ought to catch someone's eye.

What's going on? Spin doctors for the doctors? Exactly. According to Gallup surveys conducted for the AMA, 69 percent of the public is losing faith in doctors, up from 64 percent three years ago. A Gallup survey conducted earlier this year found that 56 percent of the public believes doctors don't care about people as much as they used to, and fewer than one-third agrees that doctors' fees are usually reasonable. The doctor's image is ailing, and the AMA wants to heal it.

The march up Michigan Avenue was just a very small part of the AMA's overall campaign to improve physicians' public image. In August 1991, it launched its physician advocacy campaign—to the tune of \$1.75 million—placing ads in major news magazines that portray physicians doing good work in their communities. Phase two of the ad campaign, now underway and just as pricey, will tell the public that the AMA is committed to health care reform. And while these steps undoubtedly are intended to polish the organization's own image, they'll also boost physicians' image in communities nationwide.

The AMA's ad campaign may even rub off on Minnesota physicians, whose image emerged a bit tarnished after last spring's battle with the Legislature over Health Right (now called MinnesotaCare). Never mind



ILLUSTRATIONS BY KATE MUELLER

"Physicians have to recognize that there's going to be change and play a part in making the change as positive and beneficial to their liking as they can make it."

REP. DAVE GRUENES

"We have a system that has encouraged competition where we need cooperation."

A. STUART HANSON, M.D.



that the Minnesota Medical Association heartily endorsed most of the legislation; the public was treated to a different view—of a bully-boy lobby intent on protecting the doctor's pocketbook. As *Corporate Report Minnesota* wrote in its September cover story: "Nobody seemed less equipped to embrace reform than the 5,000-plus physicians who make up the Minnesota Medical Association, and no group ultimately did more to harm its own cause."

"Did we score a lot of image points last session? No. I don't think so," says Dave Renner, the MMA's senior lobbyist for state legislation.

The institutions where doctors work—hospitals—didn't fare any better. In an effort to find out why it had failed to affect the MinnesotaCare legislation, the Council of Hospital Corporations, a coalition of metro-area hospitals, discovered in a commissioned survey that the public perceives Minnesota hospitals as greedy organizations that care more about the bottom line than the patients they serve. "We have somehow become removed from the community," council spokesperson Vic Ellison told the Minneapolis-based *Star Tribune*. "We're too much in the business mentality, and we're not involved enough in the community service mentality."

The media readily seized the image of an uncaring, self-interested medical industry, and, for their part, physicians felt misunderstood and blamed the media for carrying that view to the public. In fact, the premise of the AMA's elaborate ad campaign is that "the public does not fully understand or appreciate the work [physicians] do," says AMA President John J. Ring, M.D. Here in Minnesota, according to Thomas A. Stolee, M.D., immediate past president of the MMA, "Physicians tried to do the right thing, and they've been kicked by the press."

Not so, says Tom Majeski, who covered the health reform debates for the *Saint Paul Pioneer Press*. "[Physicians] got a fair shake at this newspaper." Majeski says he gave the MMA ample opportunity to tell its side, but physicians may have hurt themselves by arguing so vociferously against the 2 percent tax. "I think maybe the physicians are in sort of a delicate position, because they are viewed as being fairly well off financially and getting reimbursed well—except rural physicians. So it's a very

delicate position they put themselves in when they started talking about pocketbook issues. That naturally would generate some skepticism and criticism. But it was all part of the political debate."

Phillip Tichenor hasn't conducted a bias study of the MinnesotaCare coverage, but the professor of journalism and mass communication at the University of Minnesota has been studying media coverage of the medical community for many years and says times have changed.

"In the 1930s, [physicians] were priests on a high throne whose views were unchallenged," he says. "Those days are gone. It's an era of public inspection, and more and more questions are being raised."

Tichenor traces the changes to the fracturing of the medical profession into specialties and subspecialties, which has created disagreement within the profession and, in turn, has led to competition for limited media coverage. At the same time, says Tichenor, there has been "a multiplication of very strong, well-organized interest groups that have something to say and questions to raise about the medical community. All of these groups develop media strategies. Only a fraction get in—those are the most powerful and well organized. So people in the profession think the media have turned on them. The media are simply reflecting the well-organized political interest groups."

Physicians do get a bum rap in the media, and it hurts all of them, says Steven H. Miles, M.D., an internist at Hennepin County Medical Center, but he calls the bum rap argument irrelevant. Better public relations isn't the answer, he argues. Rather, physicians must get involved in the health care reform debate, and they must become conversant with the issues and welcome diversity and debate within the profession. Physicians should form coalitions with groups outside the medical industry in order to be credible with the public, says Miles, who supported the MinnesotaCare legislation and wrote a recent *Minnesota Medicine* editorial criticizing the MMA's handling of the issue ("Minnesota Physicians and Health Care Reform: After 'Health Right,'" October 1992, page 13).

"Physicians will tell you that practicing medicine isn't fun anymore. They feel constrained because of controls being imposed on them."

PROF. THEODOR LITMAN

"This is a critical time for the profession," says Miles, who is also an associate professor of medicine at the University of Minnesota Medical School and the Center for Biomedical Ethics. "The polls suggest that the public feels that physicians are a major, if not *the* major, barrier to reform. There is a consensus that med-

ical prices are way too high for services received. And there's a fear of losing health care insurance or being financially destroyed by a medical illness that is not a serious illness. A third of [workers] say they would leave their jobs but can't because they would lose health insurance. Physicians can't have it both ways; they can't regard themselves as the preeminent voice in the health care industry and point the finger elsewhere for all of the problems."

"The media are simply reflecting the well-organized political interest groups."

PROF. PHILLIP TICHENOR

Rep. Dave Gruenes, IR-St. Cloud, one of the legislators who drafted the Minnesota Health Right Act and a member of what came to be known as "the gang of seven," agrees that physicians must get involved in the political debate and stresses that involvement must start early on. Get to know your representative, he advises, so that when legislation comes up you can call to discuss concerns.

Admitting that the gang of seven drafted much of Health Right behind closed doors, Gruenes calls for better communication and understanding on both sides. "Legislators can use constructive guidance in helping to make the right decisions. [Physicians] have to recognize that there's going to be change and play a part in making the change as positive and beneficial to their liking as they can make it."

Stolee suggests that those not comfortable in the political arena can promote a positive physician image by getting involved in the community through working with the YMCA, YWCA, food shelves, and charities; coaching youth athletics; or becoming church leaders. Physicians might also do public health work, by going to schools, for example, and talking about smoking or sexually transmitted diseases. "Doctors in general are not considered to be community supporters as much as other businesspeople," Stolee says. He dismisses doctors' claims that they are too busy, saying other professionals are equally busy.

Physicians might improve their image through community service or more savvy political involvement, but according to MMA President A. Stuart Hanson, M.D.,

they still find themselves up against a system that doesn't do much to foster a positive image. "We have a system that has encouraged competition where we need cooper-

Programs Give Public a Glimpse of Doctors' Good Works

"As legislators and physicians proceed with what I hope will be a positive relationship, the ability to walk in each other's shoes is really critical," says Rep. Dave Gruenes, IR-St. Cloud. It's vital to try to understand where a person is coming from, says the legislator, who played a role in pushing MinnesotaCare (formerly Health Right) through the Legislature.

The mini-internship programs sponsored by the Ramsey, Hennepin, and Lake Superior County medical societies give community leaders the opportunity to do just that—walk in a physician's shoes. The Ramsey County Medical Society mini-internship program, the oldest of the three, began in 1988 as an attempt to show community leaders the contributions physicians make.

Those selected for the two-day program follow physicians in four areas: surgery, emergency care, specialty care, and primary care. Legislators, civic leaders, members of the media, and business leaders all have participated in the program and typically emerge with a much more positive—and accurate—perception of what the physician does, says Tom Mahowald, executive director of the Ramsey County Medical Society. "They get a better sense of the complexities and frustrations of medicine."

Physicians are encouraged to submit the names of individuals to participate in the programs. Contact the medical societies for more information:

Ramsey County Medical Society, 612/291-1209;
Hennepin County Medical Society, 612/623-3030;

Lake Superior Medical Society, 218/727-3325.

The Minnesota Medical Association also sponsors several outreach programs throughout the year. This year, it worked with the Minnesota Safe Kids Coalition to promote bicycle safety and to develop a public service announcement for radio about wearing bicycle helmets. It sponsored the 1992 KARE-11 Family Health Fair, and, at next year's fair, it plans to sponsor a phone bank with a panel of 10 physicians from different specialties to answer patient

calls. The MMA will be working closely in 1993 with the Minnesota Department of Health and the Consumer Incentives, Prevention, and Public Health Committee (a subcommittee of the Minnesota Health Care Commission) to promote healthier lifestyles and to educate the public on the proper use of the health care system. In addition, the MMA is planning a campaign against family violence and is working with the U.S. Pharmaceutical Manufacturers Association to promote the free distribution of prescription drugs to indigent patients.

The MMA also helps physicians reach the public with health information. It recently developed a slide presentation on AIDS that addresses such issues as health care worker testing and a patient's risk of becoming infected by a health care worker. The slides are available for physicians to use in speeches to community organizations and clubs. The MMA also has teamed physicians and lawyers together to talk to junior high school students about the medical and legal ramifications of drug abuse. The MMA has reference materials and a 10-minute video available for classroom presentations and coordinates the program with physicians, lawyers, and schools. To borrow the AIDS slides or to arrange a presentation on drug abuse at a local junior high, contact Beth Hoheisel at the MMA, 612/378-1875.

"One of the MMA's major goals is to promote the public health. If our activities improve physicians' image, all the better," says MMA Communications Director Mark Vukelich, who plans the association's public outreach programs.

Physicians who are interested in promoting professional image in other ways may want to consider the AMA's National Communications Conference. The AMA offers a speakers training program and advice on the best ways to respond to the media, as well as an explanation of how newspapers and television work.

For more information, contact the AMA's department of communication services, 312/464-4413.

ation. It has encouraged entrepreneurship where we need communal activity," he says.

Physicians are dealing with a situation that "evolved from an increasingly complex office structure. It expanded with a multipayer system, where there are many rules and regulations that required the physician to become more and more of a business person," says Mike Magee, M.D., a surgeon who is vice president of Pennsylvania Hospital in Philadelphia and the creator of the Pride in Medicine Project, developed in 1986 to combat flagging public support for health care systems and physicians' own depression about practicing in today's environment. "The time to become a businessperson didn't come out of nowhere. It came out of time the physician used to spend with the patient. The physician became more stressed out. The patient became more stressed out. The ability to be identified on a humanistic level suffered," says Magee.

David J. Rothman, a professor of social medicine at the Columbia College of Physicians and Surgeons, puts it this way: doctors have become strangers. In his book, "Strangers at the Bedside: A History of How Law and Bioethics Transformed Medical Decision Making," Rothman traces the events that stripped doctors of their autonomy in decision making. Starting with a 1966 exposé in *The New England Journal of Medicine* on abuses in human experimentation and culminating in

1976 in the court's interference in Karen Ann Quinlan's case, doctors' autonomy slowly eroded, Rothman argues. "After [Karen Ann] Quinlan, medical decision making became the province of a collection of strangers, with judges, lawyers, ethicists, and legislators joining doctors at their patient's bedside."

Rothman also discusses the changes in medical practice in the post-World War II era. Before the war, doctors were more



"We're too much in the business mentality, and we're not involved enough in the community service mentality."

VIC ELISON

closely linked to their patients and communities. They lived among their patients, made house calls, and, therefore, got to know individuals and families in the most intimate settings.

"The critical elements in building a practice were not degrees, specialty certification, hospital affiliation, or special skills," Rothman writes. "To attract and hold patients, physicians had to be sensitive, caring, able to listen, committed, and responsive to crises—not because they were saintly, but because the marketplace required it. The incentives put a premium on intimacy and involvement with the community. In a very real sense it paid to listen to patients, so that they would not only come back but also send their friends and relatives."

Organizational changes also have had a negative impact on the doctor-patient relationship, according to Theodor J. Litman, a professor in the School of Public Health at the University of Minnesota. Large group practices and HMOs have taken the patient away from a close relationship with his or her physician, says Litman, who is a medical sociologist. "You belong to an HMO and have your own primary doctor. Just try to get to that primary doctor. You can't. The system and size all have tended to erode that relationship. That makes people very unhappy."

Although consensus is building that the system needs greater emphasis on primary care, the primary care physician is a dying breed. "We need the primary care, but we've designed a financial system that supports the highly paid, highly technical specialties," says the MMA's Hanson.

"Where have all the primary care applicants gone?" asked Jack M. Colwill in an article in *The New England Journal of Medicine* earlier this year. Citing the precipitous decline in primary care applicants, Colwill wrote: "The selection of medical students emphasizes academic achievement—especially in science—and places relatively less emphasis on the students' commitment to service, specialty preferences, orientation toward people, and views on income, lifestyle, and prestige." Society and the medical profession suffer from the decline in interest in primary care, he wrote.

Interest in primary care may be low, but applications are down across the board. In 1974, the peak year, 42,624 Americans applied to medical school. Compare that to 1988, when there were only 26,721 applicants, or 1.6 for every opening—an all-time low. In 1989, 40 percent of the physicians surveyed by Gallup said they

would not have entered medical school if they had known then what they know now.

"Legislators can use constructive guidance in helping to make the right decisions."

REP. DAVE GRUENES

If the public is losing faith in physicians, physicians are also losing their enthusiasm for the practice of medicine. "Physicians will tell you that practicing medicine isn't fun anymore. They feel constrained because of controls being imposed on them," Litman says.

Anecdotal evidence abounds suggesting that physicians are retiring early and that fewer physicians are encouraging their children to follow in their footsteps. Doctors have low morale because their professional lives "are more hemmed in and complicated" by rules, wrote Saul Radovsky, M.D., in the January 1990 *New England Journal of Medicine*. Physicians now see themselves "cast as wrongdoers and incompetents who yearly require new laws, regulations, admonitions, court decisions, and exposés to make them more honest, ethical, competent, corrigible, and contrite. Perhaps it is no wonder if many of them now look for a change or exit."

A year ago, Edmund C. Burke, M.D., editor of *Minnesota Medicine*, wrote an editorial admonishing physicians to spend more time conversing with and listening to the patient, to document time spent volunteering, and to promote health care coverage for the uninsured and underinsured. Burke acknowledged that physicians are overburdened and that patients often have unrealistic expectations, but he said physicians can do more to make their image shine. He wrote, "We must resume our role as patient advocates—a role that, for some reason, has been lost in the sweep."

A recent study by one of Litman's students found that, to their credit, physicians do see themselves as patient advocates and are willing to override community norms in the best interest of their patients. "They need to, and the public expects them to, play that role," Litman says. But he worries that the time may come when practice protocols and other constraints will become so onerous that physicians simply will fall in line and not advocate for the patient, further eroding the physician-patient relationship.

Physicians are "the last of the individual entrepreneurs," Litman says. "They're following the footsteps of farmers finding corporate farming pushing them out. They are at a critical juncture."

MM

Miriam Feldman is a free-lance writer from Minneapolis.

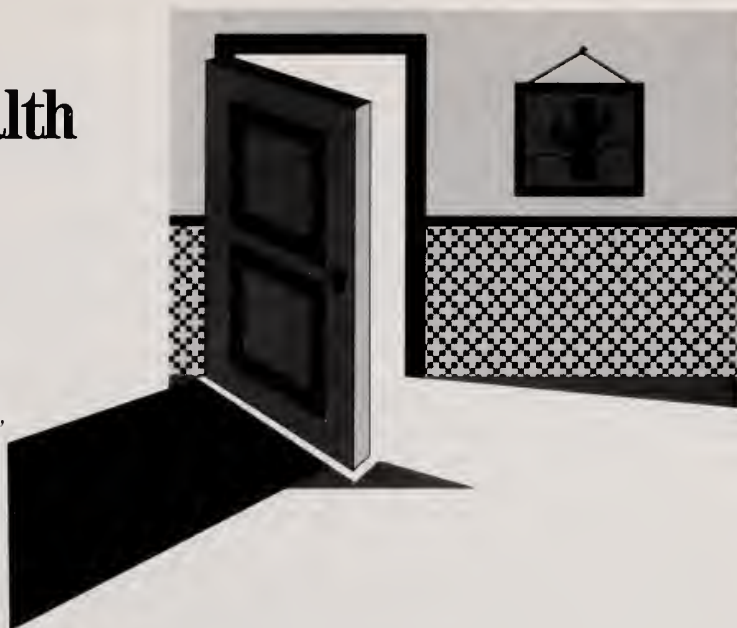


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1. Benson RC Jr. Laser photodynamic therapy for bladder cancer. *Mayo Clinic Proc* 1986;61:859-64.
2. Guttormson NL, Bubrick MP. Mortality from ischemic colitis. *Dis Colon & Rectum*, to be published.
3. Chatterjee SN. Use of GOR-TEX grafts as vascular access procedure for chronic hemodialysis. Abstract of a paper submitted to the European Society for Artificial Organs Eighth Annual Meeting, Copenhagen, August, 1981.
4. Thompson NW. Thyroid and parathyroid. In: Welch KJ, Randolph JG, Ravitch MM, et al., eds. *Pediatric Surgery*, 4th ed. Chicago: Year Book Medical, 1986: vol 1, 522-33.

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Evaluation of Fetal Cardiac Arrhythmias

Ultrasound Findings and Neonatal Outcome

Steven E. Calvin, M.D., Emanuel P. Gaziano, M.D., Richard P. Bendel, M.D.,
G. Eric Knox, M.D., and Debra G. Brandt, R.D.M.S.

ABSTRACT

During a four-year period, 3,882 fetal diagnostic ultrasounds were performed and 162 patients (4% of all patients scanned) were referred to our perinatal center for evaluation of fetal cardiac arrhythmia. Fetal echocardiography subsequently revealed an arrhythmia in 80 (49%) of these patients. The rhythm disturbances noted were premature atrial or ventricular contractions (n=65, 81%), tachyarrhythmia (n=8, 10%), and bradyarrhythmia (n=7, 9%). Three of the bradycardic fetuses evaluated had complete heart block associated with anatomic abnormalities. In seven tachycardic fetuses, the finding of fetal compromise was followed by intervention.

The majority of fetuses with cardiac rhythm disturbance will have premature atrial or ventricular contractions and will have normal echocardiographic evaluation and neonatal outcome. Sustained tachyarrhythmias and bradyarrhythmias are more likely to be associated with fetal morbidity. Based upon the findings of this study and others, we propose a scheme for follow-up of the fetus referred with an irregular cardiac rhythm.

The advent of the fetus as a patient has led to an increase in referrals for targeted anatomic fetal ultrasound examinations and greater experience with fetal echocardiography. Clinical findings of echocardiography done for a variety of indications have been published.¹ One indication for evaluation is the detection of a fetal cardiac arrhythmia on auscultation or basic fetal ultrasound examination.² The etiology, diagnosis, pathophysiology, and treatment of fetal arrhythmias have recently been reviewed.³ The finding of premature atrial contractions (PAC) and/or premature ventricular contractions (PVC) is a frequent cause of concern and anxiety to the mother and obstetrician, and there is concern that fetuses with PACs are at increased risk for the development of sustained supraventricular tachycardia (SVT).

From 1987 through 1990, our center performed a large number of examinations for fetal cardiac arrhythmia, some of which led to antepartum intervention. The purpose of this review is to correlate fetal cardiac arrhythmias with fetal echocardiographic findings and early neonatal outcome. Of particular interest is the relatively common group with premature atrial and ventricular contractions. A second aim of this study is to focus on outcomes in this group and to suggest a plan for evaluation and follow-up based upon these findings and the observations of others.

Material and Methods

Targeted fetal anatomic ultrasound examinations (level II exams) were performed on a high-risk referral population. All examinations were performed with Ultramark 8 or 9 scanners (ATL of Bothel, Washing-

ton). A technician and physician team (including a pediatric cardiologist when indicated) performed the fetal echocardiographic exams. Each exam included fetal biometric studies and detailed anatomic evaluation. Fetal cardiac exams included a four-chamber view and evaluation of outflow tracts. We evaluated rhythm disturbances by M-mode sampling of both atrial and ventricular wall motion and used Doppler flow studies to further define the anatomy and rhythm. Study results were entered on a data sheet and stored in a computerized database coded by diagnosis. We obtained only immediate neonatal outcome information and appended it to the original ultrasound data sheet. Long-term follow-up information is not available for the patients evaluated.

Results

From January 1, 1987, to December 31, 1990, 3,882 fetal level II ultrasound examinations were performed at our perinatal center. The majority of level II examinations were done for one of four indications: suspected multiple gestation, elevated maternal serum alpha-fetoprotein, anomaly of a previous child, or possible abnormality detected on a basic ultrasound exam. Of the 3,882 patients examined, 162 (4%) were referred with a primary diagnosis of suspected fetal cardiac arrhythmia. During the study, only 15 patients were lost to follow-up. The average gestational age at first examination was 27.5 weeks (range, 17-40 weeks). Ultrasound diagnosis of fetal gender revealed 80 female and 82 male fetuses. No multiple gestations were referred for evaluation of arrhythmia. Eighty fetuses (49% of those referred) had an arrhythmia present during the examination (Table 1).

Table 1

Patient characteristics

162 patients (4% of all exams)

Average gestational age at referral: 27.5 weeks (range, 17-40)

Ultrasound diagnosis of fetal gender: 82 male, 80 female

Arrhythmia present on ultrasound: 80 (49%)

Table 2

Fetal cardiac arrhythmias present on level II ultrasound exam

Arrhythmia	Percent
Premature atrial/ventricular contractions	81%
Tachyarrhythmia	10%
Bradyarrhythmia	9%

We categorized the arrhythmia types as: 1) atrial and ventricular premature beats (n=65, 81%); 2) supraventricular tachycardia (SVT) (n=8, 10%); and 3) bradyarrhythmias (n=7, 9%) (Table 2).

None of the fetuses with premature atrial or ventricular contractions or a fetal cardiac rate between 120 and 160 beats per minute had anatomic abnormalities. In addition, none of these fetuses was observed to develop subsequent supraventricular tachycardia.

In seven of the eight fetuses with SVT, the finding of fetal compromise was followed by in-utero treatment or early delivery. The one other fetus with SVT on initial examination was found to alternate between normal sinus rhythm and supraventricular tachycardia. This fetus subsequently delivered and has required medical treatment of the tachyarrhythmia in the neonatal period.

Of the seven fetuses with bradycardia, four had sinus bradycardia without clinical significance, and three of the fetuses evaluated for bradycardia had anatomic abnormal-

ities detected and accurately defined antenatally. These included hypoplastic left ventricle, D-transposition of the great vessels, and multiple septal defects with pulmonic stenosis. In the group of patients referred for ultrasound evaluation of arrhythmia, all three fetuses with detected anatomic abnormalities presented with bradyarrhythmia. At delivery, 14 neonates (10% of those with follow-up available) had persistent arrhythmia. Of the 82 fetuses (51%) with no rhythm disturbance on the initial level II ultrasound evaluation, none were found to have subsequent cardiac problems either before or after delivery.

Discussion

A review of the subgroup of fetal ultrasound exams done to evaluate fetal cardiac rhythm shows that the majority of fetuses (90%) had no abnormality at birth. A small percentage had complex congenital heart disease associated exclusively with bradyarrhythmias. During the study period, 60 fetuses were ultrasonographically diagnosed with complex congenital heart disease. Only three (5%) presented with fetal arrhythmia as the principal reason for referral. In fact, the majority of congenital heart disease is discovered on ultrasound evaluation utilizing the standard four-chamber view.⁴ None of our patients had bradycardia due to anti-SSA or anti-SSB antibody-related complete heart block.

The fetuses with tachyarrhythmia required either antepartum treatment or early delivery. The one fetus diagnosed with severe hydrops and SVT at 25 weeks' gestation was treated in utero, and a normal sinus rhythm

was established. The hydrops resolved, and a normal fetus was delivered vaginally at 38 weeks' gestation.

Our experience and that of others indicates that premature atrial or ventricular contractions are not uncommon, with premature atrial contractions predominating.⁵

Structural cardiac disease is rare in association with fetal cardiac rhythm disturbances unless bradycardia is present. The finding of persistent tachycardia should alert the clinician to the possibility of fetal cardiac decompensation manifested by ascites, pleural effusion, pericardial effusion, or hydrops. A comprehensive treatment protocol has been developed.⁶ In addition, for patients with no arrhythmia on the initial level II ultrasound examination, we recommend a repeat examination only if an arrhythmia was present on subsequent auscultation on routine prenatal visits. No patient returned to us with a recurrence of arrhythmia. It is our belief that the majority of the patients had infrequent premature atrial or ventricular contractions on the initial auscultation in the primary provider's office.

Some investigators recommend careful follow-up of the fetus referred with premature atrial and ventricular contractions.⁶ Because of the possibility of conversion to a supraventricular tachycardia or other tachyarrhythmia, we recommend at least weekly auscultation to detect the onset of sustained tachycardia. The follow-up of the 65 patients with PAC/PVC in our study group showed no conversion to sustained arrhythmia or fetal morbidity.

Fetal cardiac arrhythmia deserves investigation by ultrasound, but primary providers of obstetrical care can reassure their patients that an irregular fetal heart rhythm between 120 and 160 beats per minute is probably not ominous and that level II ultrasound evaluation will probably be normal. On the other hand, the rare fetus with sustained heart rates of less than 100 or greater than 180 deserves expedited evaluation.

As these fetal echocardiographic techniques continue to be refined,⁷ understanding of the fetal cardiovascular system will increase and accu-

rate diagnostic and management schemes will be developed for the fetus referred for cardiac arrhythmia. **MM**

Steven Calvin, Emanuel Gaziano, Richard Bendel, and G. Eric Knox are perinatologists at The Perinatal Center at Abbott Northwestern Hospital and Minneapolis Children's Medical Center. Debra Brandt is the ultrasound technologist at The Perinatal Center.

REFERENCES

1. Martin GR, Ruckman RN. Fetal echocardiography: a large clinical experience and follow-up. *J Am Soc Echocardiogr* 1990;3(1):4-8.
2. Dunnigan A. Signs and symptoms associated with cardiac rhythm disorders in the fetus, infant, and child. *Compr Ther* 1989;15(10):27-37.
3. Reed KL. Fetal arrhythmias: etiology, diagnosis, pathophysiology, and treatment. *Semin Perinatol* 1989;13(4):294-304.
4. Allan LD, Crawford DC, Chita SK, Tynan MJ. Prenatal screening for congenital heart disease. *Br Med J* 1986;292:1717-9.
5. Koyanagi T, Hara K, Satoh S, Nakano H. Developmental characteristics of fetal arrhythmias during the period from intrauterine to early extrauterine life assessed using dual echocardiography. *Int J Gynaecol Obstet* 1989;28(1):13-20.
6. DeVore GR. Fetal echocardiography and diagnosis of congenital heart disease and arrhythmias. In: Eden RD, Boehm FH, eds. *Assessment and care of the fetus*. Norwalk, Connecticut: Appleton and Lange, 1990; 334-5.
7. Reed KL, Appleton CP, Anderson CF, Shenker L, Sahn DJ. Doppler studies of vena cava flows in human fetuses: insights into normal and abnormal cardiac physiology. *Circulation* 1990;81(2):498-505.

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The Minnesota Advance Psychiatric Directive

Protecting Patient Decision Making

Gayle Dixon, J.D.

"There isn't a problem that can't be solved with a good form."

So a county attorney advised me years ago as we grappled with the mechanics of implementing a new statutory scheme. Well, Minnesotans now have another good form to add to their arsenal of legal documents for ensuring that individuals' wishes are respected in the event they become incapacitated. The new form is the "Minnesota Advance Psychiatric Directive" (MAPD), based on Minnesota Statute 253B.03. The 1991 Legislature enacted this new provision to give psychiatric patients the means to issue instructions regarding their care during periods of incompetency.

The Minnesota Mental Health Law Project has developed an excellent MAPD form. When a patient properly completes and delivers an MAPD to his or her physician or other mental health care provider, the physician or provider must comply with the instructions so long as they are consistent with reasonable medical practice and the requested treatments are available.

Intrusive Treatment

If a patient is admitted or committed to a treatment facility, so long as the patient remains competent, intrusive mental health treatment—electroshock therapy and neuroleptic medication—may be administered only with the patient's informed written consent. An incompetent patient who has prepared a valid MAPD regarding treatment with intrusive therapies must be treated in accordance with his or her wishes or in accordance with the instructions of the proxy designated in the MAPD, except in emergencies or upon a court order that intrusive

therapies be administered.

Neuroleptic medication

The MAPD form provides for very detailed instructions regarding neuroleptic medication. The patient may

"The MAPD documents the patient's treatment instructions during periods of incapacity, saving practitioners uncertainty and court procedures."

consent to medications as the treating physician deems appropriate, at dosages a specific doctor considers appropriate, or at other stated dosages.

The form includes a section for blanket refusal of any neuroleptic medication, with space for the patient to detail his or her understanding of the risks and benefits of such medication, and a section for the patient to state the reasons for declining all neuroleptic medications. A court would closely scrutinize these sections if a hearing was held to obtain an order to medicate a patient in spite of his or her objections. Space is provided for refusal of specific medications as well.

Electroconvulsive therapy

The MAPD contains similar provisions regarding electroconvulsive therapy. The patient may consent to

the administration of electroconvulsive therapy, allowing the attending physician or specified doctor to determine the number of treatments; or the patient may consent to a specific number of treatments or may entirely reject such treatment. The form provides space to detail the patient's understanding of the risks and benefits involved in the therapy and to state the reason for refusal of electroconvulsive therapy. Additional space is provided for the patient to list other instructions and preferences regarding electroconvulsive therapy.

Proxy Decision Making

A patient may appoint a proxy decision maker, identified on the form by name, address, telephone numbers, and relationship to the patient. The patient may also identify a substitute proxy. The form may include instructions to the proxy as well as an acknowledgment that the patient may revoke the appointment at any time by telling either the proxy or the mental health care provider. The patient may also nominate a guardian or conservator in the event that there is a court petition. The guardian or conservator may be someone other than the proxy appointed in the MAPD. Conversely, with living will forms, the proxy is automatically nominated if a petition for guardianship or conservatorship is brought.

Additional Instructions

The form also contains sections for general instructions regarding medical or psychiatric treatment, space to list persons to be notified in the event of hospitalization, and most important, space to state whether the patient has or has not completed a delegation of parental powers document regarding temporary placement and care of children and whether a

durable power of attorney has been executed.

Finally, two witnesses must sign the form, certifying that the person making the directive voluntarily signed the form in their presence and that the declarant understands the nature and significance of the declarations. Neither of the witnesses may be a proxy or a nominee for guardianship. The option of simply signing in front of a notary, while permitted under the living will statute, is not permitted under the psychiatric directives statute.

Competency and Revocation of an MAPD

To assist in establishing competence, the individual completing the MAPD should identify the diagnosed mental illness in the appropriate section. Minnesota courts will consider the following factors in establishing competence for this purpose: whether the patient acknowledges his or her mental illness, whether the patient is cognizant of the risks and benefits of the medical treatment he or she is accepting or rejecting, and whether the patient's refusal of treatment is based on delusional belief, including the belief that he or she is not mentally ill.

Only a competent declarant can revoke an MAPD. Practitioners should be aware that any manner of revocation is permitted, so an oral revocation must be charted and honored. Unlike living will laws, there are no criminal penalties for practitioners who fail to chart revocations of MAPDs. (Medical practitioners who fail to chart revocations for a living will under Minn. Stat. 145B.10[2] are subject to penalties of aggravated forgery under Minn. Stat. 609.625.) Practitioners should remain cognizant of the level of capacity required to revoke the various types of documents: an incompetent person may revoke a living will, but competency is required to revoke an MAPD.

Another distinction between MAPDs and living wills is that the MAPD includes no mechanism for transferring the documents should the patient change health care providers.

Practitioners associated with facilities covered under the federal Patient Self-Determination Act of 1990 would be wise to confirm that the patient has been provided information regarding MAPDs, as well as information regarding living wills and durable powers of attorney for health care. Currently in Minnesota there is no statutory basis for durable powers of attorney for health care, but these documents are increasingly used and legislation will likely be introduced in the next legislative session providing a statutory basis for their use (see also, "The Patient Self-Determination Act: Advance Directives Available to Minnesota Patients," *Minnesota Medicine*, August 1992, page 27).

An interesting question will arise when an individual with a valid MAPD is found to be incompetent and a guardian or conservator is appointed. Guardians or conservators cannot consent to psychosurgery or electroshock without court approval under Minn. Stat. 525.56(4). The statute does not directly prohibit the guardian or conservator from consenting to the administration of a neuroleptic medication. Unless an emergency situation exists, it will likely remain necessary to obtain a court order to permit intrusive treatment specifically excluded in the MAPD.

MAPD Forgeries

An MAPD that is an obvious forgery, superseded by a subsequent MAPD or verbally revoked by the patient, may provide a trap for the unwary. The wise practitioner will check documents for obvious defects, carefully chart any verbal revocations, and request that updated forms be submitted if the oral revocation includes a request to substitute instructions. The additional paperwork burdens are offset by the benefit to the practitioner: immunity from any liability if he or she relies on an MAPD and acts in good faith when administering intrusive mental health treatment.

Conclusion

Although it's another form to deal with, the Minnesota Advance Psychiatric Directive, when properly

completed, witnessed, and filed with a health care provider, will document the patient's treatment instructions during periods of incapacity, saving practitioners uncertainty and court procedures and increasing the likelihood that treatment modalities that have been successful in the past will be used in the future. Perhaps the MAPD's greatest shortcoming is that it may not be used by all psychiatric patients. MM

Copies of MAPD forms are available from the Minnesota Mental Health Law Project (with a donation), 430 First Avenue North, Suite 300, Minneapolis, MN 55401-1780; 612/332-1441; TDD, 612/332-4668; or toll-free, 800/292-4150.

Gayle Dixon is an attorney with a private practice in Minnetonka. She is coordinator of the Legal Program of the Minnesota AIDS Project and an adjunct faculty member at the William Mitchell College of Law in St. Paul.

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Employee Compensation

All Benefit Plans Are Not Equal

Steven E. Grodahl, C.P.A., J.D., LL.M.

Compensation probably offers the most fertile opportunity for closely held businesses and their owners to save taxes and accumulate wealth. Although every business provides compensation, few have developed a systematic approach for ensuring they get maximum benefit from the compensation they provide.

Compensation includes everything the employer provides for the benefit of its employees—typically the salary or wage paid in cash plus the “benefits” that are provided with the job, as well as profits available for distribution to owner-employees after everything else has been paid.

The cash component of compensation is relatively straightforward. Cash paid out as a salary or wage is tax deductible by the employer when paid and is taxable income to the employee when received. There is no particular tax advantage or disadvantage to that arrangement, generally. Cafeteria plans and 401(k) plans are exceptions. Through these plans, employees can elect to remove certain amounts from their gross compensation to save for retirement or pay for certain expenses using pre-tax dollars. This reduces the employee's taxable income while the employer is still able to take a deduction for the full compensation. In many cases, the employer may avoid workers' compensation and FICA taxes on the amounts deducted from gross pay, further increasing the tax benefits. Essentially, the employer's compensation expense is reduced while the employee's take-home pay is increased.

So how does this work?

A cafeteria plan is maintained by an employer and permits employees to choose among a variety of benefits. An account is established within the plan for each participating em-

ployee, and funds from the account pay for the employee's selected benefits. The employer, the employee, or both can contribute money to the plan.

“A cafeteria plan allows the employer to reduce its total costs for benefits while giving employees more value.”

The employer's contribution is fully tax deductible, provided all the qualifications for the cafeteria plan are satisfied. On the surface, this appears to be no better than offering fringe benefits outside a cafeteria plan and getting a tax deduction for the cost. Therein, however, lies one of the benefits of the cafeteria plan in today's workplace.

The advantage of certain fringe benefits is that they comprise an element of compensation that is fully tax deductible to the employer while the employee does not have to include their value in taxable income. If, rather than providing the benefits, the employer paid additional cash compensation and the employee bought the benefits with that additional cash, the employee would have to pay taxes on the cash. Because, in a cafeteria plan, the employer provides the benefit rather than the cash to pay for the benefit, the employee saves the corresponding taxes.

In order to get favorable tax treat-

ment, benefits must satisfy certain requirements. The most important is that the benefit must be offered to employees on a non-discriminatory basis. With some exceptions, that essentially means that if the benefit is provided to one employee, it must be provided to all.

Of course, not all employees place the same value on any given benefit. A single employee may not value health insurance with family coverage as highly as a married employee with several children. Indeed, married employees whose spouses work for employers that provide such insurance may not value their own employer's health insurance benefits at all. The employee who does not appreciate the health insurance benefit may place tremendous value on additional days of paid vacation, however.

In today's workplace, benefits are a very important factor in employees' evaluations of various jobs. Indeed, benefits of some sort are so much a part of today's workplace that employees routinely evaluate the benefits of prospective employers. It would not be unusual for an employee to consider two prospective jobs for which the cash compensation and the monetary value of the benefits are nearly identical and choose the job that has the benefits he or she perceives to be of greater value. Another person, however, may evaluate the same two compensation packages and choose the other job.

So what's an employer to do? An appropriately designed cafeteria plan may well be the answer. Such a plan may be designed a multitude of ways. Under one common arrangement, the employer makes several benefits available within the plan, contributes a fixed amount for each employee, and permits employees to make their own

contributions as well. Employees may then "spend" the money in their account on the benefits they choose. This enables each employee to obtain what he or she perceives as the maximum value from the available benefits.

The foregoing is an oversimplified description of the operation of such a plan. Several requirements must be satisfied, formalities observed, and an annual return filed with the IRS for a cafeteria plan. Failure to comply can lead to loss of the tax benefits and penalties. A discussion of the requirements is beyond the scope of this article but should be explored with your tax adviser before establishing a cafeteria plan.

Through a cafeteria plan, the employer may be able to reduce its total costs for benefits while giving employees more "value"—in effect, reduce its compensation expense and give everyone a "raise" at the same time. A survey of employees' perception of value is important before establishing such a plan.

The final step is educating employees. It is important to thoroughly explain all aspects of the plan and how it works so employees can use it to their advantage.

A 401(k) plan is another attractive benefit that can be offered to employees at little cost to the employer. A 401(k) plan is a form of retirement plan that permits employees to contribute a certain amount of gross salary to the plan rather than collect it as pay. The contribution is not included in the employee's taxable income, and the interest the money earns in the plan is also not taxable income. However, distributions from the plan are fully taxable. The plan allows the employee to accumulate money for retirement at a much faster rate. Owner-employees may also participate in the plan.

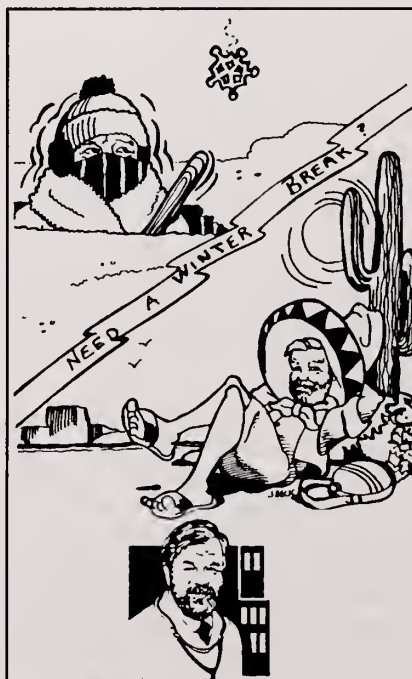
As with any other tax-favored arrangement, numerous requirements must be satisfied to obtain the favorable tax treatment.

No discussion of compensation in a closely held business setting would be complete without mention of qualified retirement plans. Collectively, they represent the best wealth-

accumulating device—with the possible exception of a professional sports contract—available today. No closely held business with substantial income should be without one.

Few businesses (including professional practices) achieve their maximum potential without good employees. One way to get and keep good employees is to pay more than anyone else, but salaries come straight out of the owners' pockets. Why not pay more without spending more? The wise business owner with a well-designed compensation package does just that. MM

Steven Grodahl is a certified public accountant and attorney with an advanced law degree in taxation and has 16 years of accounting and legal experience advising businesses and individuals. He is tax director at Carlson, Poston, and Associates, a tax, accounting, and consulting firm in the IDS Center in Minneapolis that specializes in advising closely held businesses and their owners.



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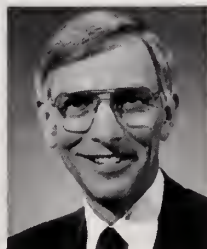
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Back to the Basics to Rebuild Physicians' Public Image

A. Stuart Hanson, M.D.

"We has met the enemy, and it is us."
—Pogo



**"A physician's image
is subjective and is
built one patient at a
time."**

The physicians' public image isn't what it used to be, we're told. Are we just waking up to the reality that the medical profession is made up of real people trying to deal with real problems, many of which are insoluble? Are we just realizing that most of what ails people is incompletely understood, and in spite of all our endeavors, still defies understanding? Or has the profession really changed? Are we less caring of our patients? Are we more self-interested and less committed to our patients' welfare and to the public good?

The answers to these questions may be subjective, but the sum of subjective surveys shows objective trends. Our patients in general hold physicians in less regard than they did 20 or 30 years ago.

I believe this is occurring in part because physicians have been asked and even forced to expand our role as care providers, and some of the fundamental aspects of our profession are getting lost in the shuffle. First among those basic elements is our implied contract with each patient that we will be that individual's advocate. Our primary responsibility is to do our very best for the patient and to bring together all available resources to treat the individual's condition.

Also fundamental to our work is the fact that we base our professional recommendations and actions on scientifically derived information. Science and its methods form the base of medical decision making. The application of medical science requires the art of education, persuasion, and motivation at the bedside, but the foundation remains science.

The third fundamental element is

the confidential, intimate, and humane relationship a physician has with the patient. The patient's mind and body are open to physicians in a way they are to no other person. Because of the strength of the doctor-patient relationship, most patients continue to hold their personal physicians in high regard.

Into these fundamental constructs has come a new set of forces to complicate and sometimes confound our relationship with patients and to tarnish their image of us. Medical care is able to change the course of injury and disease in ever-expanding ways. Treatment of the sick and injured has been broadened to include disease prevention and health promotion, leading to new roles and responsibilities for physicians and new expectations for patients. Health care interventions now extend well beyond the limited medical interventions of 50 years ago, when physicians mostly focused on physical diagnosis and interpretation of the natural history of a patient's disease. Now we are expected to make a correct diagno-

sis, interpret its meaning to the patient, and correct the problem—no matter how serious or complicated the condition might be. Treatment must be applied efficiently, at low cost, with personal compassion, and in pleasant, comfortable surroundings. If any of the criteria—superb care, superb service, low cost—is not met, the physician is blamed.

Despite the added intrusion of third-party payers, burdensome paperwork, and other hassle factors, I believe we can satisfy our patients—if we don't overlook the basics. First, I believe the physician's image is shaped by our actions. Each day we practice, we slowly build our personal integrity and, ultimately, our image with the people we serve and with others on the health care team. We must offer each patient personal attention, advocacy, caring, and compassion. And we must do so with humility.

Second, we must keep good science as the foundation for decisions we make on behalf of individual patients and for decisions we make about populations of individuals as we reform our health care system. Political debate requires good data just as medical debate does.

Finally, all physicians must learn again to nurture our patients' trust, appreciation, and respect. An individual physician's image is subjective and is built one patient at a time. The medical profession's image must be at least the sum of its parts. As a profession, we must show that we are more interested in the public welfare and in being good stewards of an effective health care system than we are in our own self-interest. What we do as individual physicians and as an organized profession creates our image. To our patients, we are what we do.

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People and Places Making Medical News

People

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Minnesota Laureate Awards

B.J. Kennedy, M.D., of Minneapolis, Robert L. Frye, M.D., of Rochester, and Kjeld O. Husebye, M.D., of St. Paul, received Minnesota Laureate Awards October 30 at the annual meeting of the Minnesota Chapter of the American College of Physicians. The awards honor fellows of the organization who have demonstrated an abiding commitment to excellence in medical care, education, research, and service to their communities and the American College of Physicians.

Shotwell Award

Internist Alvin L. Schultz, M.D., F.A.C.P., received the 1992 Shotwell Award, which is given annually to a Minnesotan, physician or non-physician, for noteworthy dedicated service to mankind, significant contributions in the field of medicine, or important innovations or improvements in the delivery of health care. Earlier this year, Schultz received the Bolles-Bolles-Rogers Award for his professional contributions to medical research and education and his long service as a medical leader. He is the first physician to receive both awards in the same year.

Schultz is senior vice president and chief operating officer of the Medical Affairs Division of Health One Corp. Previously, he was a tenured professor of medicine at the University of Minnesota Medical School and chief of medicine at Hennepin County Medical Center in Minneapolis.

ACOG District Chair

Edward C. Maeder Jr., M.D., of Edina, Minnesota, has been elected chair of District VI of the American College of Obstetricians and Gynecologists (ACOG) for a three-year term. The district includes the northern Midwest states and the provinces of Manitoba and Saskatchewan, Canada.

Maeder is a clinical professor of obstetrics and gynecology at the University of Minnesota Medical School and practices at the Park Nicollet Medical Center in Minneapolis. He was an officer for ACOG's Minnesota Section from 1983 to 1989 and has been vice chair of the district for the past three years.

HCMC Chief of Internal Medicine

William F. Keane, M.D., an internal medicine staff member at the Hennepin County Medical Center since 1975, has been appointed the center's new chief of internal medicine. He will supervise HCMC's largest department, which includes 12 divisions, 65 staff physicians, and 72 fellows and residents.

Keane is also president of the Minneapolis Medical Research Foundation, executive director of the Regional Kidney Disease Program Clinical Laboratories, director of the HCMC Nephrology Research Laboratories, co-director of the hospital's Drug Evaluation Unit and Clinical Research Unit, and a professor of medicine and pharmacy at the University of Minnesota Medical School.

St. John's Medical Director

Craig Svendsen, M.D., a family practice specialist, has been appointed medical director at HealthEast St. John's Hospital in Maplewood, Minnesota. Svendsen, a professional associate of the East Side Medical Center in St. Paul and

Oakdale, joined the hospital medical staff in 1982.

Hospital Staff Chiropractor

Chiropractor Mark Lieffring has been granted staff privileges at Mercy Hospital and Health Care Center in Moose Lake, Minnesota, making Minnesota the 18th state to grant hospital privileges to chiropractors. Under an agreement announced in November, Lieffring can evaluate and treat patients and order physical therapy and diagnostic tests, but he cannot admit patients or perform invasive procedures, such as injections or surgery. He will have the same privileges as other nonphysician members, such as podiatrists, psychologists, and physical therapists.

MDH Awards

The Minnesota Department of Health recently presented its 1992 Awards for Excellence in Health Promotion to individuals and organizations that have made an outstanding effort to help people lower their health risks through better choices about personal behavior.

Henry Blackburn, M.D., who currently heads the Division of Epidemiology at the University of Minnesota School of Public Health, received the Pioneer Award for lifetime achievement in health promotion and education. He is credited with doing some of the basic work that first shaped the profession's understanding of the relationship between health problems, such as heart disease and stroke, and factors like diet, blood pressure, and smoking.

Judy Mahle Lutter, president and co-founder of the Melpomene Institute for Women's Health Research, received the Commis-

sioner's Award for outstanding individual achievement in health promotion.

The department also awarded institutions and a community. The Minnesota Department of Health Award—for organizations with outstanding health promotion programs—went to two recipients: a breast cancer prevention project involving Park Nicollet Medical Center and MedCenters Health Plan, and a nutrition and exercise project coordinated through the Lake County Health Department. The Governor's Award, which goes to communities with exceptional health promotion programs, went to the Tri-County Youth and Family Partnership, which focused on students in the Forest Lake School District, and an injury prevention effort sponsored by St. Cloud Hospital and the Minnesota Head Injury Association.

Places

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University Receives Grant for Fetal Tissue Bank

The University of Minnesota is one of five institutions to receive a grant from the Public Health Service to establish a fetal tissue bank to provide human fetal tissue for government-funded research. The five institutions will receive more than \$6 million over the next two years from the National Institute of Child Health and Human Development, one of the National Institutes of Health. Each center will develop a system for obtaining, collecting, screening, and storing tissue, according to Assistant Health and Human Services Secretary James Mason, M.D.

The idea for the tissue banks came from a presidential directive issued in May. The tissue will come solely from miscarriages and ectopic pregnancies. The Bush Administration has opposed the

use of aborted fetuses for research and experimental therapies, fearing that encouraging the use of such tissue might boost the incidence of abortion.

Asthma Program Targets Inner-City Children

Health care professionals will team up with social workers and home care nurses at Minneapolis Children's Medical Center in a new program to combat high-risk asthma in children, which is a growing problem in the nation's inner cities. The project will focus on high-risk children and adolescents in Minneapolis' Phillips neighborhood.

"Overall, minority, inner-city children living in poverty are affected by asthma at almost twice the rate of white children who live in larger, less crowded housing," according to Tom Olsen, M.D., medical director of the Minneapolis Children's Clinic and a project co-director with David Aughey, M.D.

Home care nurses will work with clinic physicians and social workers to assess each child selected for the program, carry out an asthma teaching program, and conduct a series of home visits. In collaboration with the American Lung Association of Hennepin County, the nurses also will visit the schools in the area and conduct education programs for teachers and school-based nurses.

The five-year program has received a \$250,000 federal grant from the American Academy of Pediatrics and the U.S. Maternal and Child Health Bureau.

New Health Care Ethics Center Established

The College of St. Catherine, in joint sponsorship with the Sisters of St. Joseph of Carondelet, Fairview Riverside Medical Center, and HealthEast, has established a new Health Care Ethics Center to help patients, families, and health care professionals understand the ethical implications of treatment decisions. The center will bring

together experts in the diverse cultures, faiths, and beliefs represented in Minnesota. The program sponsors say they wish to foster informed decision making that's grounded in ethical principles.

The center plans to integrate the resources of the academic and health care institutions; explore the richness of various faith traditions, cultural frameworks, and personal belief systems; prepare clinicians, faculty, and students for leadership roles in health care ethics; integrate ethics education and practical application; and foster informed ethical decision making.

The center will be located on the St. Mary's campus of the College of St. Catherine in Minneapolis and is scheduled to begin operation in the summer of 1993.

Mayo Incinerator Approved

The Mayo Clinic's plan to build a new medical incinerator in conjunction with other medical facilities in Olmsted and Dodge counties received the go-ahead in October when the Minnesota Pollution Control Agency voted 8-1 to grant the air pollution permits. The \$10.6 million incinerator will have some of the strictest pollution control devices of any incinerator in the country. Besides controlling the usual air pollutants, the incinerator will inject carbon into gases heading up the smokestack to pull out mercury.

Socioeconomics

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HealthEast Gets Workers' Comp Certification

HealthEast Care, Inc., announced it has the first managed care plan in the state to become certified by the Minnesota Department of Labor and Industry for workers' compensation. The plan, known as WorkDirect, is now listed with the Minnesota Department of Labor and Industry, in accordance with Minnesota Statutes, chapter 176, which says state employees may

choose such a plan as their sole provider of managed care for their injured employees.

Workers' Comp Hot Line Available

The state Labor and Industry Department has started a free, 24-hour hot line called "Comp Call" for employers and injured employees who are confused by the workers' compensation system. A team of 16 to 20 department attorneys and workers' compensation specialists will answer questions, do research, and handle cases from 8 a.m. to 4:30 p.m. weekdays, according to department spokesperson Greg Frank. After hours, people can leave voice mail messages.

The department initiated Comp Call to help achieve the legislative mandate to reduce by 16 percent the \$1.2 billion employers pay annually in workers' comp premiums. The toll-free number is 800/DIAL-DLI (800/342-5354).

Medical Alley Recommends Cost-Control Scheme

Medical Alley, a trade association for Minnesota medical firms and health care providers, recommended in November a scheme for controlling high-tech medical costs without banning new technology. The proposal recommends that new medical technology be proven safe, effective, and cost-effective before health care insurers would have to pay for it. The association is vague on how the process would work, but it favors a modified market system, rather than strict regulation by the state or another agency.

The association's board, a 17-member group of corporate leaders from medical-technical companies, doctors, health plan leaders, and hospital executives, approved the recommendations, which were forwarded to the Minnesota Health Care Commission.

Rates, Trends, Data

Hepatitis A Cases High in State

Hepatitis A cases in Minnesota have been rising sharply for two years, and this year, the state is experiencing its worst outbreak of hepatitis A since 1978, according to officials at the Minnesota Department of Health. By the end of October, 629 cases had been diagnosed, a large increase over the 186 cases in 1989, 326 in 1990, and 482 in 1991. In 1978, 942 cases were reported, one of the highest rates on record. About half the state's cases, 360 this year, are diagnosed in Hennepin County.

Health Department officials are unsure why hepatitis A is increasing, but they say it might be because Minnesotans are eating more fresh vegetables and fruits. The disease is usually spread when such foods are handled by infected workers who didn't adequately wash their hands. The most recent outbreak, at the Minneapolis Athletic Club, was traced to an infected food handler, said Vicki Thelen, Hennepin County epidemiologist.

Mayo Study Finds Increase in Asthma Rates

Asthma rates for children in the Rochester area doubled and even tripled for some age groups over a 20-year period, according to a Mayo Clinic study published in the October issue of the *American Review of Respiratory Disease*. The researchers speculate that more energy-efficient homes, which reduce air-leakage and trap more airborne particles, such as cat dander, may be one reason for the increase.

From 1964 to 1983, the annual rate of new asthma cases tripled in boys and girls aged 10 to 14 and girls aged 5 to 9. The rate roughly doubled in children aged 1 to 4 and boys aged 5 to 9. The rates for other age groups remained about the same.

Other studies have shown an increase in asthma rates during the 1970s and 1980s. Scientists are

unsure of the reasons but speculate that more energy-efficient homes, greater survival of low-birthweight infants, more cigarette smoking by mothers, and greater use of day care (which could expose infants to more viral infections) are possible explanations.

Innovations

'U' Finds Heart Surgery May Help Diabetics' Kidney Transplants

University of Minnesota researchers have found that survival is improved for insulin-dependent diabetics who need kidney transplants if physicians first reopen or bypass the patients' coronary arteries if the arteries are at least 75 percent blocked, according to a study published in the October 30 *Lancet*.

The researchers randomly assigned 26 diabetics with asymptomatic heart disease and failed kidneys to one of two groups: patients in the first group received conventional medical treatment with heart drugs; patients in the second group underwent balloon angioplasty or coronary artery bypass surgery. The researchers discontinued the formal study in 1990 because patients receiving drug treatment had a significantly higher rate of death from heart attack. None of the 13 who had undergone surgery died of a heart attack, but four of those treated with drugs died of heart attacks. Only two of those who underwent heart surgery experienced symptoms of heart disease or a heart attack, compared with 10 of the 13 given the drug treatment. The researchers continued following the patients after the study was halted.

The study is preliminary because it only included 26 patients, said Connie Manske, M.D., a kidney specialist at the university and co-author of the study.

Leukemia Patient Receives Cord-Blood Transplant

Physicians at the University of Minnesota in September treated a 5-year-old leukemia patient with blood taken from his newborn brother's umbilical cord, reported John Wagner, M.D., an assistant professor of pediatrics at the university. It was only the second time a "cord-blood transplant," which is actually a blood transfusion, has been done in the United States for treating leukemia, although the procedure has been tried about 15 times throughout the world to deal with various diseases.

The cord blood contains stem cells, like those found in bone marrow, but the procedure has advantages over a bone marrow transplant. The cord blood appears to be less likely to cause adverse reactions in patients, and the transplants may not require as close a tissue match as bone marrow transplants.

Wagner performed the world's first cord-blood transplant for a leukemia patient two years ago at Johns Hopkins University in Baltimore, Maryland. The patient is doing well, but doctors are unsure whether his leukemia is cured.

Fast CT Shows Promise in Detecting Heart Disease

Two recently published Mayo Clinic studies indicate that "fast" computed tomography shows great promise as a tool to quickly, non-invasively, and inexpensively detect early coronary artery disease. Fast CT is a high-speed x-ray scanner capable of taking "stop-action" pictures of moving organs. Its role as a screening tool stems from its ability to sensitively detect small deposits of calcium in the coronary arteries. The studies show that calcium is a good marker for the presence of early-stage atherosclerosis.

One study, reported in the

November issue of *Radiology*, compared fast CT scans with results from angiograms in 100 patients. Fast CT detected calcium in the coronary arteries of 75 patients. Angiograms detected coronary artery disease in 71 patients. Comparing the two, the authors found that fast CT detected 94 percent of all cases of coronary artery disease and 100 percent of cases of significant coronary artery disease. Equally important, the study also found that if no calcification was present on the CT scan, no significant coronary disease was present on the angiogram.

The second study looked at 13 hearts removed from deceased patients. The hearts were examined with fast CT and the results compared with microscopic examinations of the hearts' coronary arteries by a pathologist. The study, reported in the November issue of *The Journal of the American College of Cardiology*, found a direct relationship between the presence of calcium on fast CT images and the presence of atherosclerosis in coronary arteries.

The authors report that the presence of coronary calcification on fast CT scans "is highly predictive of the presence of histopathologic coronary disease; but its use to define the extent of coronary disease may be limited."

New Procedure Offers View of Fallopian Tubes

Methodist Hospital is using a new diagnostic technique that allows physicians to see the inside of a fallopian tube and detect abnormalities that could cause infertility or other problems. The procedure, called falloposcopy, uses the LEC falloposcope system, developed by Imagyn Medical, Inc., of San Clemente, California.

Randle Corfman, M.D., Ph.D., a fertility specialist at Methodist, co-authored a scientific paper reporting the results of a clinical study that was presented at the American Fertility Society's Annual Meeting in New Orleans November 2-5. The results show that a

high degree of reliable image production is achieved safely and effectively using a falloposcope with a Linear Everting Catheter (LEC). The FDA-approved clinical trial included 92 women, 57 of whom were infertile. In 80 percent of the cases, successful visualization was achieved and several abnormalities were detected, which in some cases led to altering the course of treatment.

Methodist will be one of only a few institutions in the country offering the LEC falloposcope procedure, the hospital reports.

Medical Research

Benefits of Lowering Cholesterol Questioned

Following an international review questioning the value of reduced cholesterol for healthy people, some prominent researchers are calling for a scaling back of national cholesterol-reduction programs.

The review, published in the September issue of *Circulation*, found that overall death rates for women appeared to vary little whether the women had low, moderate, or high levels of cholesterol. Women with very high cholesterol (above 240) died more often of heart attacks, but that was balanced by lower rates of death from certain kinds of stroke and other diseases. Overall death rates of men with borderline high cholesterol levels (200 to 239) differed little from death rates of men who had moderate cholesterol levels (160 to 199). Men with low cholesterol levels (below 160) were 17 percent more likely to die from all causes, namely lung cancer, respiratory disease, digestive disease, and accidental or violent deaths, than men with moderate cholesterol levels.

The authors warn that low cholesterol might not be causing the trouble; rather, the trouble may be causing the low cholesterol. "It's conceivable to me that in certain

diseases, cholesterol would be lowered before death," acknowledged University of Minnesota epidemiologist David Jacobs, the primary author of the paper.

The review summarizes 19 studies of 523,737 men and 124,814 women in the United States, Japan, Europe, and Israel and includes data from some of the largest U.S. studies of cholesterol and health.

'U' Researchers Find Genetic Defect Related to Alzheimer's

Between 90 and 95 percent of people with early-onset Alzheimer's disease have a defect in the same area of the 14th chromosome, say researchers at the universities of Minnesota and Washington in the October 23 issue of *Science*. Researchers are looking for the precise genes that are malfunctioning, which will help scientists develop a way to prevent the disease from developing, said Leonard Heston, M.D., a former University of Minnesota professor of psychiatry and one of 13 researchers on the project.

Information learned by isolating the defective gene could lead to the development of a drug to prevent at-risk individuals from developing early-onset Alzheimer's, said co-author Harry Orr, a professor of laboratory medicine and pathology at the University of Minnesota's Institute of Human Genetics. He said he wouldn't be surprised to see such a drug within the next five years.

Genetics May Not Limit Life Span

Researchers at the University of Minnesota and elsewhere say that mortality rates actually begin to decline once people reach a certain age, meaning there may be no predetermined genetic reason to put an upper limit on the normal life span. Their findings, published in the October 16 issue of *Science*, are based on studies of large populations of fruit flies and of

Swedish death records.

James Curtsinger, a professor of ecology, evolution, and behavior at the university, and his colleagues studied a sample of genetically homogeneous fruit flies and reached the same conclusion as researchers at other universities who studied more than 1 million genetically diverse fruit flies.

Researchers found that mortality rates accelerate up to 25 or 30 days and then level off. Fruit flies in the wild live only a week or two, but the oldest survivors in the lab lived more than 50 days. "There is some genetic influence (on longevity)," said Curtsinger, "but it's not something that's tightly programmed, like planned obsolescence."

To see if mortality rates in humans follow the same pattern, researchers checked census data from Sweden, where the Lutheran church has kept accurate records of births and deaths for two centuries. James Vaupel, a former University of Minnesota demographer now working at a medical school in Denmark, studied the records and found that mortality rates among the oldest people in Sweden are dropping at about 1 percent per decade.

"The message that's coming out of the project suggests that people are going to be living longer, and that there isn't some magic number, like 120, and you can't get past that point," said Curtsinger in a Minneapolis-based *Star Tribune* article.

Chromium May Increase Life Span

Dietary supplements of the metal chromium can extend the life span of rats by more than one-third and may extend human lives as well, said a Minnesota researcher in October. Biochemist Gary Evans of Bemidji State University gave a special chromium supplement to 10 rats and compared them with 20 rats that received chromium in a form less readily absorbed. After 41 months, 80 percent of the rats receiving the readily absorbed supplement (chromium picolinate)

were still alive, while all others were dead, he reported at a meeting of the American Aging Association. The rats getting the supplements lived an average one year longer than the others.

More than 90 percent of U.S. adults have a dietary deficiency of chromium, in part because it is not readily absorbed from many foods, according to biochemist Richard Anderson of the U.S. Department of Agriculture in Beltsville, Maryland. Researchers at the USDA have developed and patented "chromium picolinate," the form of chromium Evans used, which is more easily absorbed by the body.

Report Calls Lyme Disease Underreported, Overdiagnosed

Lyme disease is "underreported and overdiagnosed," says a new Mayo Clinic study on the occurrence of Lyme disease in Olmsted County, Minnesota. Searching medical records, researchers found 68 patients who had received a diagnosis of Lyme disease between 1980 and 1991. Only 17 of those cases met the Centers for Disease Control's criteria for the disease; only four were reported to state health officials. (Three of the cases were contracted locally, the first reported cases in Olmsted County.)

"Many patients who are diagnosed and treated for Lyme disease may not have the disease," said rheumatologist Eric Matteson, M.D., a co-author of the study. "At the same time, we aren't sure how many people may have the disease because it is so underreported. There appears to be little physician awareness of or compliance with a 1982 Minnesota law that requires physicians to report each case of Lyme disease." **MM**

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A Calendar of Continuing Medical Education Courses

Provided through the MMA Medical Education Subcommittee on CME Resources. For assistance with scheduling meetings or for information on future medical meetings and CME courses, please contact the MMA office: 2221 University Avenue SE, Suite 400, Minneapolis, Minnesota 55414; 612/378-1875. Information for each entry is arranged by date; name of program; primary sponsor; location; contact person.

DECEMBER 1992

Dec. 5 Minnesota Obstetrical and Gynecological Society Fall Scientific Meeting Minnesota Obstetrical and Gynecological Society; Minneapolis Marriott City Center, Minneapolis, MN. CONTACT: Susan Thompson, 5000 West 39th Street, St. Louis Park, MN 55416; 612/924-1802.

Dec. 11-12 Laparoscopic Urologic Surgery Office of Continuing Medical Education, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

JANUARY 1993

Jan. 4-8 Team Management of Diabetes Mellitus International Diabetes Center; International Diabetes Center, Minneapolis, MN. CONTACT: Cindy Poppitz, International Diabetes Center, 5000 West 39th Street, Minneapolis, MN 55416; 612/927-3393.

Jan. 9 Pediatric Seminar (Pain) Group Health Foundation; Minneapolis Metrodome Hilton (tentative), Minneapolis, MN. CONTACT: Debbie Bladine, 2829 University Avenue SE, Minneapolis, MN 55414; 612/623-8479.

Jan. 15 Minnesota Urological Society Pyelogram Conference Minnesota Urological Society; Hotel Sofitel, Bloomington, MN. CONTACT: Jennifer Syltie, 2221 University Avenue SE, Suite 400, Minneapolis, MN 55414; 612/378-1875 or 800/999-1875.

Jan. 21-22 NIOSH-Approved Spirometry Training Midwest Center for Occupational Health and Safety; Earle Brown Conference Center, St. Paul, MN. CONTACT: Registrar, Continuing Education, Midwest Center for Occupational Health/Safety, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

Jan. 21-22 Pulmonary Function Testing Workshop St. Paul-Ramsey Medical Center; St. Paul-Ramsey Medical Center, St. Paul, MN. CONTACT: Office of CME, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

Jan. 23 The Fourth Decade of Oral Contraception Office of Continuing Medical Education, University of Minnesota Medical School; Los Angeles, CA. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington

Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Jan. 22-23 Advanced Laparoscopic Abdominal Surgery Abbott Northwestern Hospital, Laser Education Center; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME-14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

Jan. 25-29 Team Management of Diabetes International Diabetes Center; International Diabetes Center, Minneapolis, MN. CONTACT: Cindy Poppitz, International Diabetes Center, 5000 West 39th Street, Minneapolis, MN 55416; 612/927-3393.

Jan. 28-Feb. 3 1993 Update in Clinical Neurophysiology Mayo Clinic/Mayo Foundation; Mayo Foundation, Rochester, MN. CONTACT: Rita Kunz or Jan Fleck, Postgraduate Courses, Section of CME, Siebens 5, Mayo Foundation, 200 1st Street SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

Jan. 30 The Fourth Decade of Oral Contraception Office of Continuing Medical Education, University of Minnesota Medical School; Los Angeles, CA. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

FEBRUARY 1993

Feb. 5-6 Advanced Gastrointestinal Tract Surgery Abbott Northwestern Hospital, Laser Education Center; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME-14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

Feb. 12 Genetics for Practicing Physicians Office of Continuing Medical Education, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Feb. 12 Minnesota Urological Society Pyelogram Conference Minnesota Urological Society; Hotel Sofitel, Bloomington, MN. CONTACT: Jennifer Syltie, 2221 University Avenue SE, Suite 400, Minneapolis, MN 55414; 612/378-1875 or 800/999-1875.

Feb. 13 Adult Medicine Group Health Foundation; Minneapolis Metrodome Hilton (tentative), Minneapolis, MN. CONTACT: Debbie Bladine, 2829 University Avenue SE, Minneapolis, MN 55414; 612/623-8479.

Feb. 18-20 Advanced Gynecologic Surgery Mayo Foundation; Disney's Yacht and Beach Club Resorts, Lake Buena

Vista, FL. CONTACT: Rita Kunz or Jan Fleck, Postgraduate Courses, Section of CME, Siebens 5, Mayo Foundation, 200 1st Street SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

Feb. 18-20 **1993 Update in Clinical Neurophysiology** Mayo Clinic/Mayo Foundation; Mayo Foundation, Rochester, MN. CONTACT: Rita Kunz or Jan Fleck, Postgraduate Courses, Section of CME, Siebens 5, Mayo Foundation, 200 1st Street SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

Feb. 19 **Burn Care Today** St. Paul-Ramsey Medical Center; Holiday Inn East, St. Paul, MN. CONTACT: Office of CME, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

Feb. 19-20 **Advanced Laparoscopic Abdominal Surgery** Abbott Northwestern Hospital, Laser Education Center; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME-14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

Feb. 21-26 **Brain to Pelvis** Office of Continuing Medical Education, University of Minnesota Medical School; Beaver Creek, CO. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Feb. 24-25 **Geriatric Drug Therapy Symposium** Office of Continuing Medical Education, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Feb. 26 **Management of Atherosclerotic Diseases** Office of Continuing Medical Education, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

Feb. 26-28 **Neurology in Clinical Practice** Mayo Clinic/Mayo Foundation; Mayo Foundation, Rochester, MN. CONTACT: Rita Kunz or Jan Fleck, Postgraduate Courses, Section of CME, Siebens 5, Mayo Foundation, 200 1st Street SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

MARCH 1993

March 3-7 **Selected Topics in Internal Medicine** Mayo Foundation; Hotel del Coronado, San Diego, CA. CONTACT: Rita Kunz or Jan Fleck, Postgraduate Courses, Section of CME, Siebens 5, Mayo Foundation, 200 1st Street SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

March 8-12 **Medical Update 1993** Office of Continuing Medical Education, University of Minnesota Medical School; Hughes Education & Conference Center, Fort Lauderdale, FL. CONTACT: Becky Noren, Office of Continuing Med-

ical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

March 8-12 **Second Annual Minnesota-Costa Rica Medical Week: Diagnostic and Therapeutic Frontiers in Medicine** University of Minnesota and Autonomous School of Medical Sciences of Central America; San Jose, Costa Rica. CONTACT: Hugh D. Westgate, M.D., 4731 Gaywood Drive, Minnetonka, MN 55345; 612/938-1474.

March 11-12 **Family Medicine Today** St. Paul-Ramsey Medical Center; Holiday Inn East, St. Paul, MN. CONTACT: Bonnie Young, Office of CME, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

March 12 **Minnesota Urological Society Pyelogram Conference** Minnesota Urological Society; Hotel Sofitel, Bloomington, MN. CONTACT: Jennifer Syltie, 2221 University Avenue SE, Suite 400, Minneapolis, MN 55414; 612/378-1875 or 800/999-1875.

March 12-13 **Advanced Gastrointestinal Tract Surgery** Abbott Northwestern Hospital, Laser Education Center; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME-14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

March 19 **14th Annual Occupational Medicine Update** St. Paul-Ramsey Medical Center; Holiday Inn East, St. Paul, MN. CONTACT: Office of CME, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

March 19-20 **Advanced Laparoscopic Abdominal Surgery** Abbott Northwestern Hospital, Laser Education Center; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME-14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

March 22-26 **Obstetrical & Gynecologic Review for Primary Care Physicians** Mayo Foundation; Tradewinds, St. Petersburg, FL. CONTACT: Rita Kunz or Jan Fleck, Postgraduate Courses, Section of CME, Siebens 5, Mayo Foundation, 200 1st Street SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

March 25-26 **Critical Care 1993: Practical Approaches & Case Discussions** St. Paul-Ramsey Medical Center; Holiday Inn East, St. Paul, MN. CONTACT: Office of CME, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

March 27 **Ob/Gyn Seminar** Group Health Foundation; Minneapolis Metrodome Hilton (tentative), Minneapolis, MN. CONTACT: Debbie Bladine, 2829 University Avenue SE, Minneapolis, MN 55414; 612/623-8479.

APRIL 1993

April 1-2 **Annual Obstetrics & Gynecology Update** St. Paul-Ramsey Medical Center; Holiday Inn East, St. Paul, MN. CONTACT: Office of CME, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

April 1-3 **Rheumatology: Diagnostic and Therapeutic Trends** Mayo Foundation; Amelia Island Plantation, Amelia Island, FL. CONTACT: Rita Kunz or Jan Fleck, Postgraduate Courses, Section of CME, Siebens 5, Mayo Foundation, 200 1st Street SW, Rochester, MN 55905; 507/284-2509 or 800/323-2688.

April 2 **ENT Update** St. Paul-Ramsey Medical Center; St. Joseph's Hospital, St. Paul, MN. CONTACT: Office of CME, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

April 2-3 **Advanced Gastrointestinal Tract Surgery** Abbott Northwestern Hospital, Laser Education Center; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME-14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

April 2-3 **Annual Ophthalmology Course** Office of Continuing Medical Education, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

April 3 **The Diagnosis of Early Prostate Cancer** Minnesota Urological Society; Registry Hotel, Bloomington, MN. CONTACT: Jennifer Syltie, 2221 University Avenue SE, Suite 400, Minneapolis, MN 55414; 612/378-1875 or 800/999-1875.

April 8 **Public Policy Conference** Office of Continuing Medical Education, University of Minnesota Medical School; Cowles Auditorium, Hubert H. Humphrey Center, Minneapolis, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

April 19-23 **Family Practice Review & Update 1993** Office of Continuing Medical Education, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

April 20-21 **NIOSH-Approved Spirometry Training** Midwest Center for Occupational Health and Safety; Earle Brown Conference Center, St. Paul, MN. CONTACT: Registrar, Continuing Education, Midwest Center for Occupational Health/Safety, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

April 20-21 **Pulmonary Function Testing Workshop** St. Paul-Ramsey Medical Center; St. Paul-Ramsey Medical Center, St. Paul, MN. CONTACT: Office of CME, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

April 23-24 **16th Annual Update in Clinical Cardiology** Abbott Northwestern Hospital; Hilton Downtown, Minneapolis, MN. CONTACT: Minneapolis Heart Institute Foundation, 920 East 28th Street, Minneapolis, MN 55407; 612/863-3079.

CONTINUING MEDICAL EDUCATION

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Winter-Spring Conference Schedule

Mark your calendar now for these upcoming conferences:

1992

December 9 Current Topics in Rheumatology—1992, Bloomington

1993

February 19 Burn Care Today, St. Paul
 March 11-12 Family Medicine Today, St. Paul
 March 19 Occupational Medicine Update, Minneapolis
 March 25-26 Critical Care 1993: Practical Approaches & Case Discussions, St. Paul
 April 1-2 Ob/Gyn Update, St. Paul
 April 2 ENT Update for Primary Care Physicians, St. Paul
 April 30 Domestic Violence: Healing the Family

Information and Registration:

Continuing Medical Education, St. Paul-Ramsey Medical Center,
 640 Jackson Street, St. Paul, MN 55101; Phone 612/221-3992

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January 5	"Hyperbilirubinemia in Newborns" presented by A Pediatrician from Children's Hospital of St. Paul
January 19	"Recognition and Treatment of Pigmented and PreCancerous and Cancerous Skin Lesions" - Steven E. Prawer, MD
February 2	"Radiologic Assessment of Peripheral Vascular Disease" - Douglas B. Ketcham, MD
February 16	"Emerging Pathogens in Infectious Disease" - Dale Gerding, MD
March 2	"Endocrine Emergencies" - Mark P. Stesin, MD
March 16	"Pediatric Orthopaedics: Avoiding the Pitfalls" - Larry S. Stern, MD
March 30	"Gut Motility Disorders" - James R. Woods
April 13	"Asthma Update" - Theodore Berman, MD

For further information contact the
Office of Medical Education and Research,
Health One (612) 574-7895
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April 24 **Ophthalmology Update** Mayo Clinic/Mayo Foundation; Mayo Foundation, Rochester, MN. CONTACT: Darcie Skoda, Mayo Clinic, Department of Ophthalmology, 200 1st Street SW, Rochester, MN 55905; 507/284-1709.

April 30 **Domestic Violence: Healing the Family** St. Paul-Ramsey Medical Center; Holiday Inn East, St. Paul, MN. CONTACT: Office of CME, 640 Jackson Street, St. Paul, MN 55101; 612/221-3992.

April 30-May 1 **Advanced Laparoscopic Abdominal Surgery** Abbott Northwestern Hospital, Laser Education Center; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME-14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

M A Y 1 9 9 3

May 1-2 **Common Hand Problems** Office of Continuing Medical Education, University of Minnesota Medical School; Orthopaedic Learning Center, Minneapolis, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

May 7 **Daily Management of the HIV-Positive Patient** Office of Continuing Medical Education, University of Minnesota Medical School; Sheraton Inn Midway, St. Paul, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

May 7-8 **Annual Meeting of the Midwest Pain Society** Abbott Northwestern Hospital, Sister Kenny Institute; Hyatt Regency, Minneapolis, MN. CONTACT: Dale Moss, Chronic Pain Rehabilitation Program, Sister Kenny Institute, 800 East 28th Street, Minneapolis, MN 55407; 612/863-4361.

May 11 **Symposium on Gynecologic Oncology** Office of Continuing Medical Education, University of Minnesota Medical School; Radisson Hotel Metrodome, Minneapolis, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

May 12-14 **Current Concepts in Radiation Therapy** Office of Continuing Medical Education, University of Minnesota Medical School; Mayo Memorial Auditorium, Minneapolis, MN. CONTACT: Becky Noren, Office of Continuing Medical Education, 615 Washington Avenue SE, Suite 107, Minneapolis, MN 55414; 612/626-7600.

May 14-15 **Cutaneous Laser Surgery** Abbott Northwestern Hospital, Laser Education Center; Abbott Northwestern Hospital, Minneapolis, MN. CONTACT: Cathy Kohn, CME-14202, Abbott Northwestern Hospital, 800 East 28th Street, Minneapolis, MN 55407; 612/863-5461.

Physician Opportunities and Miscellaneous Listings

Classified rates are \$1.00 a word. Minimum monthly charge is \$35; with box number \$5 additional. Ads will not be accepted by phone.

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- The publisher reserves the right to decline or withdraw advertisements. The publisher is not responsible for clerical or typographical errors and is not permitted to divulge the identity of advertisers who have replies sent to box numbers.
- Cancellation of ads must be made by the first of the month preceding month of issue.

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Internist to join a progressive 13-physician group practice. Rural college town 30 miles from St. Paul, Minnesota. New clinic and constructing new hospital. Contact: Robert B. Johnson, M.D., River Falls, WI 54022; 715/425-6701. (*9/91-R)

Mankato: FP partner to join four board-certified family physicians, ages 34-43, in fast-growing, full-range practice. ob optional. Population 40,000+. Seventy miles to Twin Cities. Four colleges nearby. Subspecialty consultation readily available on hospital staff. Academic appointment available. Call: Tony Giefer, M.D., 507/387-8231. (8/91-R)

Family Physicians: Well-established south suburban Minneapolis family practice group seeks associates part/full time to staff day clinic. Excellent call schedule, salary, and fringe benefits. Also seeking locum tenens to staff PT/FT Urgent Care Centers and/or day clinic. Contact: Administration, Family Physicians, P.A., 612/435-4125, or send inquiries to Suite 100, 14050 Nicollet Avenue South, Burnsville, MN 55337. (*9/89-R)

Mankato Clinic, Ltd. is seeking BC/BE physicians in the following specialties: invasive cardiology, oncology/hematology, pulmonary medicine, general surgery, gastroenterology, family practice, and general internal medicine. The Mankato Clinic is a 53-physician multispecialty group

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BC/BE Internal Medicine and Ob/Gyn Physician: Excellent opportunity to join a well-established, progressive, 26-physician multispecialty group located in an economically sound community of 22,000 (drawing area of 45,000), 65 miles south of the Twin Cities. Full membership after one year. Competitive salary and fringe benefits package. Contact: Craig Oien, M.D., or Terry Tone, Administrator, 134 Southview, Owatonna, MN 55060; 507/451-1120. (9/92-R)

Forest Lake Doctor's Clinic is seeking a BC/BE family physician and ob/gyn to join a growing 12-physician multispecialty practice. Located 25 miles north of Twin Cities in progressive community with excellent schools, outstanding recreational activities. Hospital located across street from clinic. Respond with CV or call Doug Sill, M.D., Harvey Frank, M.D., or Geoff LaGary, Administrator, 121 SE 11th Avenue, Forest Lake, MN 55025; 612/464-7100. (11/92-R)

MDsearch assists medical groups and hospitals in their recruiting efforts. For confidential information on opportunities in the Upper Midwest, send CV and/or call collect: Mary Jo Cordes, MDsearch, PO Box 21507, St. Paul, MN 55121; 612/454-7291. (12/91-R)

Lake City, Minnesota: Family physician BC/BE needed to join three other FPs in progressive, growing practice on Lake Pepin/Mississippi River in southeastern Minnesota. Excellent first-year salary/benefits in a scenic community with multiple recreational opportunities. Contact: D.D. Pflaum, M.D., 303 South Washington, Lake City, MN; 612/345-3318. (8/90-R)

Olmsted Medical Group is seeking BC/BE physicians in the following specialties: orthopedics, radiology, family practice, emergency medicine, and ob/gyn. Great opportunity for well-trained physicians to join a 55+ physician multispecialty group in a dynamic, progressive practice. In addition to the main office in Rochester, the group operates eight branch offices in southeastern Minnesota. Excellent salary/benefits package includes malpractice insurance, flexible benefits plan, 401(k) and profit sharing, and relocation assistance. Send CV to: Olmsted Medical Group, Attn: Susan Schuett, 210 Ninth Street SE, Rochester, MN 55904. (1/92-R)

Downtown Office Space for Rent: Physician in the Medical Arts Building, 825, wishes to sublet to another physician on a part-time basis for the purpose of sharing overhead expenses. Call: 612/370-0553. (6/90-R)

Wisconsin: 120-physician multispecialty clinic in the Fox River Valley of northeastern Wisconsin desires two BC/BE pediatricians to join department of 15 BC/BE pediatricians. Excellent compensation and benefits package, leading to shareholder status after two years. The community offers a superb recreational, cultural, and family environment in which to practice. For information please call or write: Howard Kidd, M.D., La Salle Clinic, 411 Lincoln Street, Neenah, WI 54956; 414/727-4276. (3/91-R)

Family Physician wanted to join three board-certified M.D.s in well-established, expanding group practice. Weekend ER coverage. No buy-in. Financial package hard to beat. Enjoy a progressive, rural city within easy reach of St. Cloud and Minneapolis. Contact: Dr. Jim Mohs, Melrose Clinic, 603 West Main Street, Melrose, MN 56352; office, 612/256-4228; home, 612/256-3488. (4/91-R)

Ideal Internal Medicine Practice: Excellent opportunity for BC/BE internist to establish a prosperous practice. Progressive 107-bed community hospital with a medical staff of 48 physicians and a service-area population of over 60,000. Vibrant Northern Michigan community with all summer

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Internal Medicine, Pediatrics, and Dermatology practice opportunities available at the Faribault Clinic. The Faribault Clinic is a multispecialty group practice of 19 physicians. Faribault is located 50 miles south of Minneapolis on I-35. For more information contact: Ray W. Wood, M.D., or Ken Smith, Administrator, 924 NE First Street, Faribault, MN 55021; 507/334-3921. (4/90-R)

Stillwater: Multispecialty group with emphasis on primary care seeking BC/BE family physician, pediatrician, and internist. Scenic location with excellent school system, supportive medical community with strong local hospital, competitive salary and benefits. Send CV to: Jon Pedersen, St. Croix Valley Clinic, 921 Greeley, Stillwater, MN 55082; 612/439-2215. (12/92-R)

Pediatrician wanted to join group of five board-certified pediatricians in a well-established, progressive group practice. Located in Minneapolis, minutes away from Children's Medical Center. Small practice stressing patient care and preventive medicine. Contact: Gregg Savitt, M.D., 3145 Hennepin Avenue, Minneapolis, MN 55408. (9/91-R)

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Falls Medical Search Seeks Physicians for practice opportunities locally and nationally. To explore new practice options confidentially, send your CV or call: Pat Falls, Falls Medical Search, 34 Forest Dale Road, Minneapolis, MN 55410; 612/922-0207 or 800/383-8916. (*5/92-R)

General Surgeon: Five-man family practice group seeks surgeon. Only clinic in city of 8,000, one hour from Minneapolis. Position should generate adequate salary and lots of family time. Please contact James W. Dey, M.D., or Ruth Hawker, Clinic Manager, 501 North State Street, Waseca, MN 56093; 507/835-3110. (5/92-R)

One or Two Family Practice Physicians to join five family practitioners. Population 8,000. One hour south of Burnsville Center. Lakes, industry, negotiable salary. Clinic adjacent to hospital. Ample free time to enjoy family life. Contact James W. Dey, M.D., or Ruth Hawker, Clinic Manager, 501 North State Street, Waseca, MN 56093; 507/835-3110. (5/92-R)

The Morris Medical Center, P.A., is currently seeking a family practitioner to join our multispecialty group. Morris, Minnesota, is a community of 5,500 residents with a four-year liberal arts college. Contact: Mike Flicker, Administrator, PO Box 600, Morris, MN 56267; 612/589-3232. 6-12/92

Internist: Regional treatment center interested in full-time BC/BE internist. Forty hours/week. Competitive salary and benefits. Live in the exciting Brainerd Lakes area. Send CV to: Chief of Medicine, Brainerd Regional Human Services Center, 1777 Highway 18 East, Brainerd, MN 56401. *6-1/93

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Oshkosh, Wisconsin: Medical groups are recruiting in internal medicine, pulmonology, rheumatology, emergency medicine, ob/gyn, child neurology, child psychiatry, ophthalmol-



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Wisconsin: Growing southern-Wisconsin, 47-physician, multispecialty group is seeking an endocrinologist, general surgeon, internist, neurologist, ob/gyn, ortho surgeon, psychiatrist, and rheumatologist. Guaranteed salary with incentive plus full benefits package. Excellent family environment in college community of 50,000+. Send CV to J.F. Ruethling, Administrator, Beloit Clinic, S.C., 1905 Huebbe Parkway, Beloit, WI 53511; or call 608/364-2200. 6-3/93

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3-12/92

Wisconsin—Internist Wanted: Group Health Cooperative, a progressive, growing, primary-care group practice in a city of 60,000—90 miles from Minneapolis/St. Paul—is currently recruiting a third BC/BE internist. Very competitive salary with excellent fringe benefits. Practice high-quality internal medicine in a most desirable location. Please contact: Stuart R. Lancer, M.D., M.B.A., Medical Director, Group Health Cooperative, P.O. Box 3217, Eau Claire, WI 54702-3217; 715/836-8552. *3-12/92

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Wisconsin—Family Practitioner Needed by progressive and growing group practice in west-central Wisconsin city of 60,000. Ninety miles from Minneapolis/St. Paul. Primarily prepaid practice with large component FFS. Highly competitive salary with excellent fringe benefits. Practice high-quality care in a good recreational area. Send CV to: Stuart R. Lancer, M.D., M.B.A., PO Box 3217, Eau Claire, WI 54702-3217; 715/836-8552. *3-12/92

Pain Fellowship: Position for PGY4 or PGY5 to participate in a one- or two-year program of clinical pain management and clinical or basic research beginning July 1, 1993, sponsored by the Department of Neurology, Hennepin County Medical Center in Minneapolis. The program is one that maintains an active outpatient practice and sees hospitalized patients on a referral basis from all departments. Opportunities to learn pharmacological management, acupuncture, peripheral nerve blockade, biofeedback techniques, and other areas related to pain are available. Hennepin County Medical Center is an equal opportunity educator and employer and specifically invites and encourages applications from women and minorities. Application and CV should be sent to Miles J. Belgrade, M.D., Director, Hennepin Pain Clinic and Research Center, Department of Neurology-823, Hennepin County Medical Center, 701 Park Avenue South, Minneapolis, MN 55415. 6-4/93

Suburban Milwaukee: Primary-care group seeking BC/BE internist, family physician, pediatrician, IM/PD. Excellent payer group, beautiful new clinic in delightful area. Attractive compensation package and partnership track provided. To have a practice profile sent to you, contact John Goff at 800/236-7688. *2-12/92

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3-1/93

Internal Medicine—Minneapolis, Minnesota: Suburban multispecialty group with eight internists is seeking a general internist with or without subspecialty interest. One hospital practice, excellent salary and benefits program. BC/BE. Contact: Sim Gesundheit, M.D., 612/571-0457, or send CV to: Columbia Park Medical Group, 6401 University Avenue NE, Suite 200, Fridley, MN 55432.

3-1/93

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3-1/93

Family Practice Physician, BC/BE, to join 25-physician multispecialty group in Winona, Minnesota, with existing four-physician Family Practice Department. Total draw of 40,000 population. Competitive salary offered. Interested physicians please contact: J.B. Knuesel, Administrator, Winona Clinic, Ltd., 420 East Sarnia, Winona, MN 55987.

3-1/93

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3-1/93

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(11/92-R)

Family Practice Physician, BC/BE, to join progressive 24-physician multispecialty group practice. Rural setting with metropolitan practice style, 25 miles from Minneapolis. Group has excellent reputation and large geographical referral area. Recently expanded facility is adjacent to newly remodeled 110-bed hospital. Comprehensive benefits package with excellent remuneration. Contact: Joseph E. Van Kirk, M.D., Lakeview Clinic, Ltd., 424 State Highway 5 West, Waconia, MN 55387; 612/442-4461 or 612/446-1295. AA/EOE.

2-12/92

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\$125,000 with excellent benefits. Contact: Dr. Paul Hayes, 906/563-9255; Dr. William Gladstone, 906/563-8743; or John Schon, Administrator, 800/236-3240. Anderson Memorial Hospital, Main Street, Norway, MI 49870. *1-12/92

Attn: Primary Care Physicians: Interested in Florida opportunities? Contact Fred E. Wellhausen, 2100 NE 39th Street #6, Lighthouse Point, FL 33064; phone: 305/786-9757. *(11/92-R)

Wisconsin—Michigan: What are your prerequisites for a practice? Strelcheck & Associates, an extension of our clients' recruiting departments, has several opportunities that might be of interest to you. We currently represent our clients in the areas of dermatology, emergency medicine, neurosurgery, occupational medicine, oncology, orthopedics, orthopedics-hand, otolaryngology, psychiatry, and urology. Locations in metropolitan areas, mid-size cities, on lakes, streams, or near forests—you choose. To discuss your practice preferences and these opportunities, please call our toll-free number, 800/243-4353, or send your CV to Strelcheck & Associates, Inc., 10624 North Port Washington Road, Mequon, WI 53092. *3-2/93

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Ob/Gyn: Physician needed to practice obstetrics in a northern Michigan community. Currently there are two ob/gyn's in partnership and an additional physician is needed. Partnership offers a salary guarantee of \$225,000 with excellent benefits. Contact Dr. Cook or Dr. Henke at 906/779-1290 or John Schon, Administrator, Dickinson County Memorial Hospital, 400 Woodward Avenue, Iron Mountain, MI 49801; 800/236-3240. *1-12/92

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Orthopedic Surgeon: Physician needed to practice general orthopedics in northern Michigan community. The partnership or solo practice offers a salary guarantee of \$250,000 and excellent benefits. Contact Dr. Roberts or Dr. Slajus at 906/774-7647 or John Schon, Administrator, Dickinson County Memorial Hospital, 400 Woodward Avenue, Iron Mountain, MI 49801; 800/236-3240. *1-12/92

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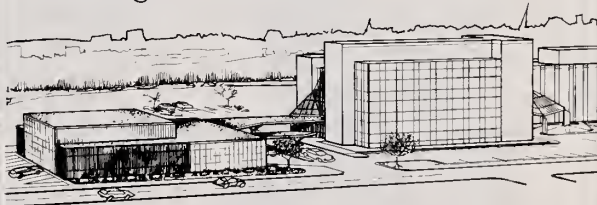
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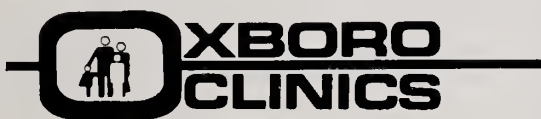
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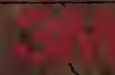
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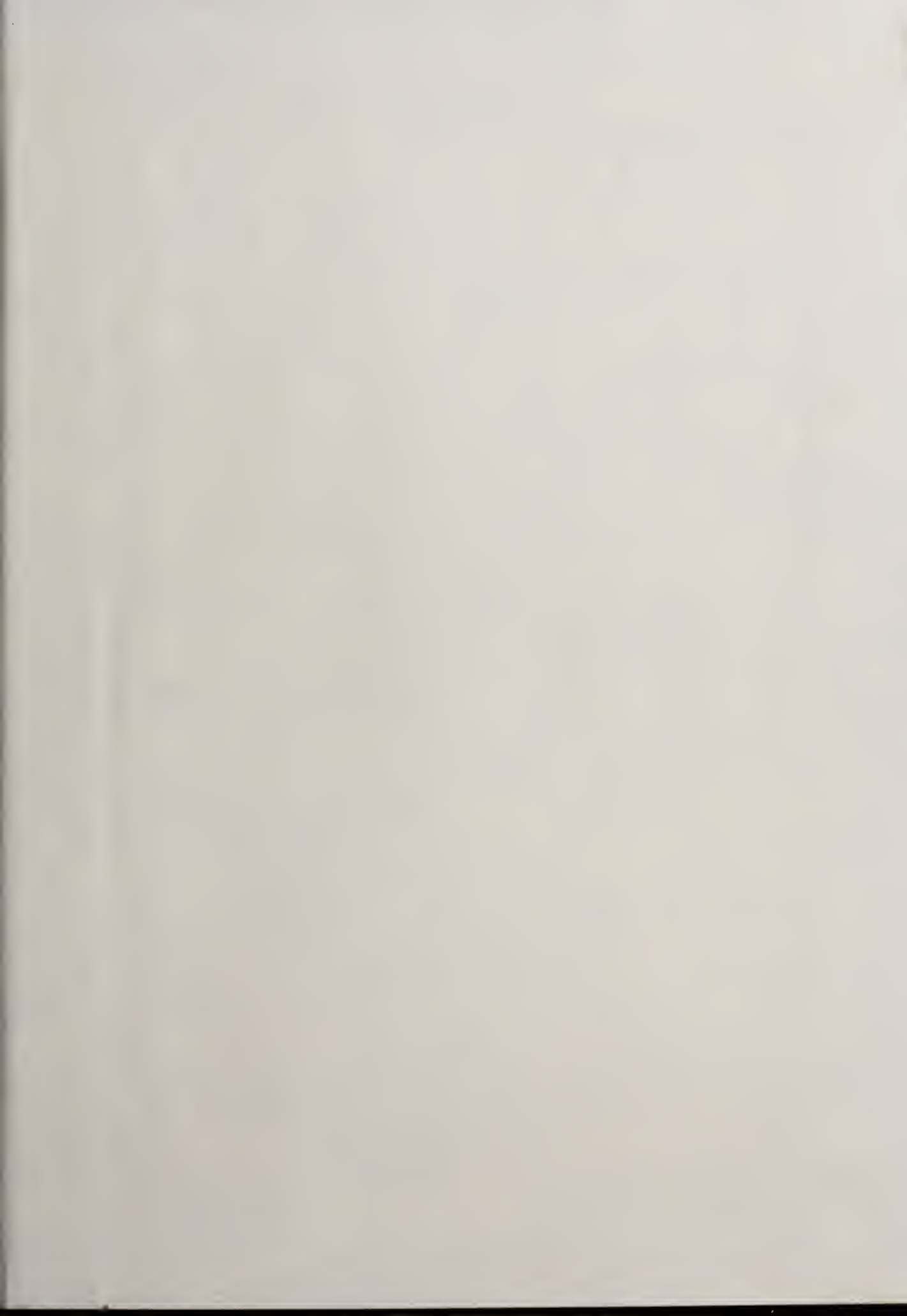
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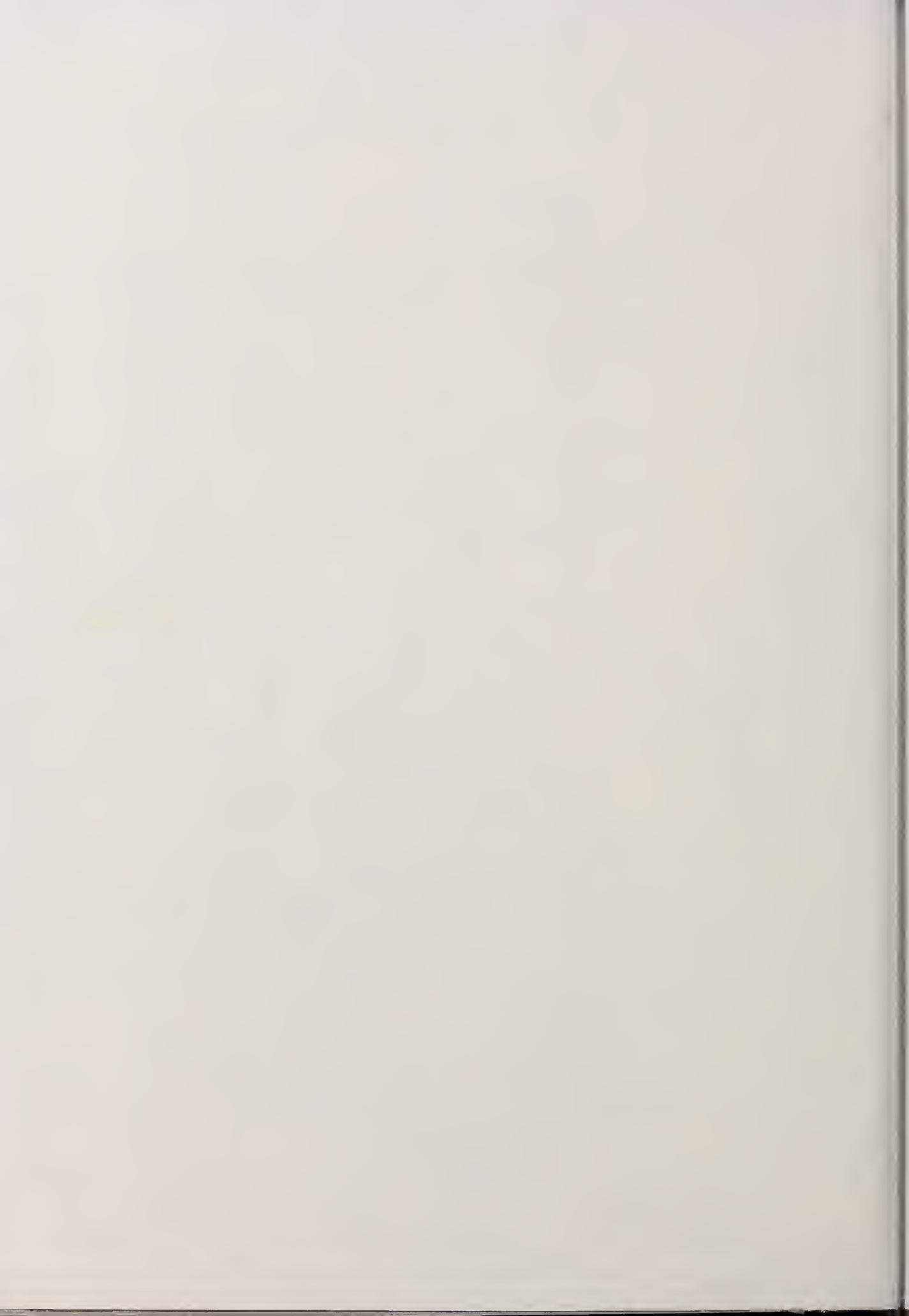
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